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SUBJECT-MATTER INDEX

PATENTS FOR INVENTIONS

(BREVETS D'INVENTION)

GRANTED IN

FRANCE

FROM 1791 TO 1876 INCLUSIVE.

U. S. — Patent Office.

TRANSLATED, COMPILED, AND PUBLISHED UNDER AUTHORITY OF THE COMMISSIONER OF PATENTS.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1883.

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PREFATORY NOTE.

This volume has been prepared in order to make more available the large collection of French patents now in the library of this office; it is arranged under one subject-matter index, dictionary form, as the best means of referring to the French "Brevets d'Invention," and to conform as nearly as possible to the plan followed in the index to patents in the United States Patent Office.

To save space the references to volume and page are abbreviated, as well as the months, of which illustrations will be found upon the first page of the index. The varied systems of the French classification and plans of indexes used will be found fully described in the "Explanations," where it will be observed that of necessity there arises some confusion from the changes made from time to time in both the categories and indexes.

The alphabetical lists of patentees found in the French general indexes and in the volumes of Brevets have been thought sufficient for the purposes desired and are omitted here.

UNITED STATES PATENT OFFICE,
November 1, 1883.

EXPLANATIONS.

In the publication of French patents, three systems have been followed, comprising but not coterminous with the three series of volumes of "Description des Machines et Procédés, etc."

These three series have been numbered 1, 2 and 3, for the convenience of the United States Patent Office; they are officially distinguished in the volumes themselves as:

1. "Description des Machines et Procédés consignés dans les Brevets d'Invention, de Perfectionnement et d'Importation, etc."

2. "Description des Machines et Procédés pour lesquels des Brevets d'Invention ont été pris sous le régime de la loi du 5 Juillet, 1844."

3. "Description des Machines et Procédés pour lesquels des Brevets d'Invention ont été pris sous le régime de la loi du 5 Juillet, 1844 (Nouvelle Série)."

The first system comprises the ninety-three volumes of the first series containing titles at least of all patents issued under the law of January 7, 1791; that is, all patents applied for between that time and October 9, 1844, at which time the law of July 5, 1844, went into force. As explained in the preface to volume 1, the numbering of these patents follows the order of expiration and does not correspond to the serial numbers of the patents. The catalogue for 1843 is the first publication giving any indication of the serial numbers; from this it appears that certificates of addition received separate serial numbers. This fact accounts for the discrepancy in the total number of patents, the highest number in the "Description" being 12,543, while the numbers in the catalogue for 1844 reached 17,262, perhaps a few more. This first system or series is closed.

The second system comprises the first seventy-nine volumes of the second series—that is, all patents issued under the law of July 5, 1844, between October 9, 1844, and December 31, 1860, upon which the second annual fee had been paid by the inventor, and only so much of the description as was in the discretion of the Minister of Agriculture and Commerce deemed essential (see No. 186 in volume 1, for instance). Consequently, the last number in volume 19, No. 27,046, appears in the catalogue for 1860 as No. 47,882, while the last patent for 1860, No. 47,988, in the catalogue appears as No. 26,876 in volume 78, page 289 of the "Description." (The catalogue numbers every patent, maintained or abandoned.) These volumes contain a few stragglers from later years. The serial numbering of this series is not a continuation of the preceding, but begins afresh with No. 1.

Patents issued in this interval and abandoned before payment of second annual fee, as having no place in the volumes, are *not to be found* in this index.

Six Indexes (Tables Générales) have been published by the French Government covering the aforementioned volumes, including each a catalogue of patentees and a loosely classified subject-matter index; they cover the following volumes respectively:

First Series, volumes 1–40.
First Series, volumes 41–93.
Second Series, volumes 1–20.
Second Series, volumes 21–40.
Second Series, volumes 41–60.
Second Series, volumes 61–79.

With 1860 the third and final system appears, comprising the remaining volumes of the second and all of the third series. The second series has now (September, 1883) reached volume 106, and will, at the present rate, reach 116 at the close of this series, with 1870. The last volume of the third series as yet published is No. 25. These volumes contain all patents issued during the year to which they refer (with an occasional exception, in which case the missing patent will be found

in the next volume containing the same class), with the actual serial number prefixed; arranged in categories, numerically in two sets in each category, first those upon which the second annual fee was paid, and, second, those which were abandoned by the patentee; the first set in full or extracts; the second, titles only. The categories are arranged in twenty classes variously subdivided. In this index the reference number of the class corresponds to that adopted in the earlier volumes; that of the subclass corresponding to the one actually found in the volume to which the reference applies; with certain exceptions hereinafter noted, the following gives the correspondences and the volumes in which they are found:

Class.	Subclass.	Name.	Translation.	Second series.	Third series.
I	....	AGRICULTURE.	AGRICULTURE.	80, 82, 85, 89, 93, 97, 101, 105	1, 3, 6, 10, 14, 18, 22
	1	Machines agricoles.	Machines.		
	2	Engrais, amendements, remèdes, etc.	Fertilizers, insecticides, &c.		
	3	Travaux d'exploitation.	Appliances.		
	4	Meunerie.	Milling.		
	5	Boulangerie.	Breadmaking.		
II	....	HYDRAULIQUE.	HYDRAULICS.	80, 82, 86, 90, 94, 98, 102, 106	2, 4, 7, 11, 15, 19, 23
	1	Moteurs.	Motors.		
	2	Autres.	Other apparatus.		
III	....	CHEMINS DE FER.	RAILWAYS.	80, 82, 87, 91, 95, 99, 103	2, 4, 8, 12, 16, 20
	1	Voie.	Way.		
	2	Matériel de l'exploitation.	Rolling stock.		
IV	....	TEXTILES.	TEXTILES.	80, 82, 88, 92, 96, 100, 104	2, 5, 9, 13, 17, 21, 25
	1	Filature.	Spinning.		
	2	Teinture, apprêts, impression, etc.	Dyeing, finishing, printing, &c.		
	3	Tissage.	Weaving.		
	4	Passementerie.	Trimmings, braid, &c.		
	5	Tricots.	Knitting.		
	6	Tulles, dentelles et filets.	Lace.		
V	....	MACHINES.	MACHINERY.	80, 82, 87, 91, 95, 99, 103	2, 5, 8, 12, 16, 20, 24
	1	Machines à vapeur.	Steam engines.		
	2	Chaudières à vapeur.	Steam boilers.		
	3	Organes, etc.	Parts of engines.		
	4	Machines-outils.	Wood, metal, and stone working machines.		
	5	Machines diverses.	Various machines.		
	6	Manœuvre de fardeaux.	Hoisting and transporting.		
	7	Machines à coudre.	Sewing machines.		
	8	Moteurs.	Air and gas engines.		
	9	Machines à fabriquer les chaussures.	Shoemaking machines.		
VI	....	MARINE ET NAVIGATION.	MARINE AND NAVIGATION.	80, 84, 87, 91, 95, 99, 103	2, 5, 8, 12, 16, 20, 24
	1	Construction de navires et engins de guerre.	Shipbuilding and naval armament.		
	2	Machines marines et propulseurs.	Marine engines and propellers.		
	3	Gréement, sauvetage, etc.	Rigging, life-preserving, &c.		
	4	Travaux des ponts, des rivières et des canaux.	Hydraulic engineering.		
VII	....	CONSTRUCTIONS CIVILES.	CIVIL ENGINEERING.	80, 84, 88, 92, 96, 100, 104	2, 5, 9, 13, 17, 21, 25
	1	Matériaux.	Building materials.		
	2	Ponts et routes.	Bridges and roads.		
	3	Travaux d'architecture.	Building.		
VIII	....	MINES ET MÉTALLURGIE.	MINES AND METALLURGY.	80, 84, 85, 89, 93, 97, 101, 105	1, 3, 6, 10, 14, 18, 22
	1	Exploitation des mines et carrières.	Mining.		
	2	Fer et acier.	Iron and steel.		
	3	Métaux autres que le fer.	Other metals.		
IX	....	MATÉRIEL DE L'ÉCONOMIE DOMESTIQUE.	FURNITURE AND HOUSEHOLD ARTICLES.	81, 83, 86, 90, 94, 98, 102, 106	2, 4, 7, 11, 15, 19, 23
	1	Articles de ménage.	Household articles.		
	2	Serrurerie.	Locks.		
	3	Coutellerie et service de table.	Cutlery and table-ware.		
	4	Meubles et ameublement.	Furniture.		
X	....	CARROSSERIE.	CARRIAGE-MAKING.	81, 83, 88, 92, 96, 100, 104	2, 5, 9, 13, 17, 21, 25
	1	Voitures.	Carriages.		
	2	Sellerie.	Saddlery and harness.		
	3	Maréchalerie.	Horseshoeing.		
	4	Compteurs.	Registers.		
XI	....	ARQUEBUSERIE ET ARTILLERIE.	ARTILLERY AND SMALL ARMS.	81, 84, 88, 92, 96, 100, 104	2, 5, 9, 13, 17, 21, 25
	1	Fusils.	Fire-arms.		
	2	Canons.	Ordnance.		
	3	Équipement et travaux militaires.	Military equipments and works.		

Class.	Subclass.	Name.	Translation.	Second series.	Third series.
XII	....	INSTRUMENTS DE PRÉCISION.	INSTRUMENTS.	81, 84, 86, 90, 94, 98, 102, 106	1, 4, 7, 11, 15, 19, 23
	1	Horlogerie.	Horology.		
	2	Appareils de physique et de chimie.	Physical and chemical apparatus.		
	3	Appareils de médecine et de chirurgie.	Medical and surgical apparatus		
	4	Télégraphie.	Telegraphy.		
	5	Poids et mesures et instruments de mathématique.	Weights and measures and mathematical instruments.		
XIII	....	CÉRAMIQUE.	CERAMICS.	81, 82, 86, 90, 94, 98, 102, 106	1, 3, 7, 11, 15, 19, 23
	1	Briques et tuiles.	Bricks and tiles.		
	2	Poterie, faïence, porcelaines.	Pottery.		
	3	Verrerie.	Glass.		
XIV	....	ARTS CHIMIQUES.	CHEMISTRY.	81, 83, 85, 89, 93, 97, 101, 105	1, 3, 6, 10, 14, 18, 22
	1	Produits chimiques.	Chemicals.		
	2	Matières colorantes.	Colors.		
	3	Huiles, essences, résines, caoutchouc, vernis, cirages, encres, etc.	Oils, essences, resins, India-rubber, varnish, blacking, ink, &c.		
	4	Bougies, savons.	Soap and candles.		
	5	Sucres.	Sugar.		
	6	Boissons autres que le vin.	Beverages other than wine.		
	7	Vin, alcool, éther, vinaigre, etc.	Wine, alcohol, ether, vinegar, &c.		
	8	Substances organiques et conservation.	Food preparations and preserving.		
XV	....	ÉCLAIRAGE ET CHAUFFAGE.	LIGHTING AND HEATING.	81, 84, 86, 90, 94, 98, 102, 106	1, 3, 6, 11, 15, 19, 23
	1	Lampes, allumettes.	Lamps, matches, &c.		
	2	Gaz.	Gas.		
	3	Combustibles et appareils.	Fuel and heaters.		
XVI	....	CONFECTION.	APPAREL.	81, 83, 85, 89, 93, 97, 101, 105	1, 3, 6, 10, 14, 18, 22
	1	Mercerie, ganterie.	Furnishings, gloves, &c.		
	2	Parapluies, ombrelles, cannes, etc.	Umbrellas, canes, &c.		
	3	Vêtements.	Clothing.		
	4	Chaussures.	Boots and shoes.		
XVII	....	ARTS INDUSTRIELS.	FINE ARTS, &C.	81, 83, 86, 90, 94, 98, 102, 106	2, 4, 7, 11, 15, 19, 23 (1, 3)
	1	Peinture, dessin, gravures, sculpture.	Fine arts.		
	2	Lithographie et typographie.	Printing.		
	3	Photographie.	Photography.		
	4	Musique.	Music.		
	5	Bijouterie et orfèvrerie.	Jewelry and goldsmithing.		
XVIII	....	PAPETERIE.	PAPER.	81, 83, 85, 89, 93, 97, 101, 105	1, 3, 6, 10, 14, 18, 22
	1	Pâtes et machines.	Manufacture.		
	2	Articles de bureau, presses à copier.	Stationery, copying presses.		
XIX		CUIRS ET PEAUX.	HIDES AND LEATHER.	81, 83, 86, 90, 94, 98, 102, 106	1, 3, 7, 11, 15, 19, 23
XX		ARTICLES DE PARIS ET PETITES INDUSTRIES.	NONDESCRIPT.	81, 83, 86, 90, 94, 98, 102, 106	2, 4, 7, 11, 15, 19, 23

Second series, volume 80, has: V, 1, Machines à vapeur fixes; V, 2, Machines-outils; V, 3, Moteurs; VIII, 4, Matériel des usines métallurgiques.

Volume 84: XI, 1, Fusils; XI, 3, Canons.

Third series, volume 1: XIV, 3, and XIV, 6, combined; XII, 1, and XII, 5, combined.

Volume 2: V, 1, Machines à vapeur fixes; V, 1 *bis*, Chaudières à vapeur; V, 2, Machines à travailler les métaux, les bois, &c.; V, 2 *bis*, Organes, &c.; V, 2 *ter*, Machines à coudre; V, 3, Moteurs; V, 3 *bis*, Machines diverses.

Volume 4: IV, 4, Tricots et passementerie; II, 2, is wrongly numbered as II, 3.

Volume 5: XI, 1, Équipements militaires; XI, 2, Fusils; XI, 3, Canons.

Volume 20: III, 2, Locomotives; III, 3, Voitures et accessoires (cars); III, 4, Appareils divers (various).

The patents for 1866, 1867, and 1868, volumes 97 to 106, arrived too late to have their references included in this index; their serial number is given followed by a star. The method for finding them when the serial number only is given is as follows: find from the "Catalogue des Brevets d'Invention" the name of the patentee; look for the latter in the index at the end of the last vol-

ume for the year; this will give the volume, class, subclass, and page required. For instance, suppose it be required to find patent No. 75,198; taking the catalogue for 1867, in which that number must occur according to its order, we find the patentee to be "Compagnie parisienne d'éclairage et de chauffage par le gaz," and the subject "Système de distribution et d'extraction des gaz d'éclairage," taking the index at the end of volume 104, we find four entries under the company in question, viz:

CI. *Arts chimiques:* Produits chimiques, 45.

CII. *Éclairage et chauffage:* Gaz, 6 et 13.

CIII. *Machines:* Manœuvre des fardeaux, 1.

CIII. *Machines:* Moteurs, 8, 9, et 11.

From the subject it will be obvious that the patent required will be one of the two referred to in volume 102; looking on page 6, of *Éclairage et chauffage*, Gaz, that is, XV, 2, we find the required patent. The same method will serve to find patents for 1868, 1869, and 1870, volumes 107 to 116, when they appear. Patents for 1877, third series, volumes 22 to 25, are not found in this index; a separate supplementary index to them is in course of preparation.

Catalogues (French) have appeared as follows:

1. "Catalogue des Spécifications, etc.," indicating all patents issued from July 1, 1791, to July 1, 1825;

2. Sixteen supplements to the same, each for one year, No. 1 for the remainder of 1825, to No. 16 for 1840;

3. "Catalogue des Brevets, etc.," somewhat of a résumé of the preceding, containing all patents issued from January 1, 1828, to December 31, 1842, remaining in force on January 1, 1843;

4. The same yearly from 1843 to date, except that patents issued in 1844 under the law of 1844 appear in the volume for 1845.

The internal arrangement of these catalogues varies somewhat; from the beginning through the volume for 1852, each publication contains a subject-matter index and a name index; for 1853 to 1855 the patents appear arranged numerically in the twenty classes afterward adopted for publication (see above) and name indexes; from 1856 to date there appear numerical lists, name indexes and subject-matter indexes, the latter variously arranged; with 1877 the catalogues begin to appear twice a month, each issue containing a list, accompanied by its own name and subject-matter indexes, the whole supplemented at the end of the year by a general name and subject-matter index.

In the references in the body of this work the following order is observed:

Title of patent in ordinary type.

Patentee in full-face.

Date, months abbreviated, as shown on page 1.

{ I=1st series, 1791–1844.
{ II=2d series, 1844–1870.
{ III=3d series, 1871.

Number of volume in full-face.

{ i=1st part of volume.
{ ii=2d part of volume.

c, class and subclass, as indicated on page VI of explanations.

p, page of volume or of subclass.

pl, plate.

Number of patent, only occasionally given.

t. e., title entry only.

* indicates that the patent had not been printed at the time this index was made.

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— truck, wheel for rollers, etc. **Cunningham.** 16 Mr. 1868. 81035*.
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— **Faucheux.** 27 Ap. 1868. 80670*.
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— **Herland.** 28 N. 1871. III, **2**, c. 3, 2, p. 19, pl. 3.
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— **Miltimore et Mickel.** 22 Ag. 1872. III, **4**, c. 3, 2, p. 57.
— **Motteau.** 8 N. 1865. II, **95.** 69128. t. e.
— **Prentiss.** 3 Je. 1854. II, **37**, p. 149, pl. 40.
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— **Roy.** 27 Je. 1855. II, **50**, p. 50, pl. 9.
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— **Tourey et Morel.** 3 Jl. 1862. II, **82**, c. 3, 2, p. 16.
— **Vidard.** 5 Mr. 1862. II, **82**, c. 3, 2, p. 4, pl. 2.
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— **Lengelée.** 30 O. 1873. III, **9**, c. 10, 1, p. 10, pl. 2.
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— — **Géniès.** 22 D. 1862. II, **83**, c. 10, p. 21.
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—, — **Coutant et Cie.** 8 Ag. 1870. 90811*
—, — **Coutant et Cie.** 14 S. 1872. III, **4**, c. 3, 2, p. 45, pl. 20.
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— **Roos.** 10 Je. 1858. II, **67**, p. 414.
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— **Béridot.** 12 Mr. 1869. 84716*.
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— **Couette.** 1 F. 1876. III, **21**, ii, c. 7, 3, p. 24. 111293. te.
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and buttons from enamel biscuit, making. **Anthoine et Grouselle.** 24 D. 1864. II, **90**. 65583. te.
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— **Genevrier.** 16 D. 1871. III, **2**, c. 9, 2, p. 15, pl. 2.
— **Percheron.** 27 Ja. 1863. II, **86**, c. 9, 2, p. 9.
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— **Dépensier et Moreau.** 16 O. 1862. II, **83**, c. 9, 2, p. 19, pl. 2.
— **Dépensier et Moreau.** 17 D. 1869. 88184*
— **Dumyrat.** 23 S. 1876. III, **19**, i, c. 9, 2, p. 42. 114,662. t. e.
— **Leleu.** 22 F. 1876. III, **19**, i, c. 9, 2, p. 41. 111672. te.
— **Lesquivin.** 13 D. 1856. II, **59**, p. 229.
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— **Walker.** 21 O. 1868. 82897*.
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— — **Descorps et Dubilé.** 27 O. 1876. III, **20**, ii, c. 5, 5, p. 89. 115153. t. e.
— — **Dupouy.** 11 Mr. 1873. III, **7**, c. 13, 3, p. 7.
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— — **Lannabras.** 20 Mr. 1872. III, **4**, c. 20, p. 15; **5**, c. 5, 5, p. 56.
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— — **Pelorson fils.** 14 Mr. 1870. 89336*.
— — and rush. **Céalés.** 31 Mr. 1868. 80221*.
— — — **Dargelos.** 19 O. 1869. 87238*.
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— — **Speyser.** 8 N. 1865. II, **96**. 69262. t. e.
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— **Brydges.** 21 N. 1876. III. **20**, i, c. 3, 3, p. 29, pl. 9. 115617.
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— **Cellier.** 7 Ja. 1864. II, **91**. 61420. t. e.
— **Chabane.** 4 S. 1866. 72921*.
— **Cheradame, Bellet et Premout.** 13 N. 1867. 78463*.
— **Clark.** 13 N. 1867. 78464*.
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— **Coccapieller de Guggenbhüller.** 20 S. 1876. III, **20**, i, c. 3, 3, p. 37. 114659. t. e.
— **Cockshoot et Weatherill.** 25 My. 1868. 81169*.
— **Courtois.** 27 F. 1875. III, **16**, ii, c. 3, 2. 106705. t. e.
— **Cousté.** 10 Ag. 1872. III, **4**, c. 3, 2. p. 44.
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— — **Peyrol.** 12 Ja. 1869. 83951*.
— — apparatus. **Gunther.** 18 F. 1867. 75035*
— — — **Somon.** 5 O. 1869. 87353*.
— and cutting. **Dabadie.** 1 S. 1868. 82350*.
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— — **Lecomte.** 10 F. 1868. 79529*.
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— **Dreville, Thibault et Cie.** 21 Jl. 1864. 63871*.
— with claw, etc. **Beuchat.** 28 N. 1874. III, **10**, c. 16, 1, p. 18.
— without tongue. **Besson.** 22 My. 1868. 81029*.
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— for papers, patterns, etc. **Massé et Anglade.** 2 D. 1872. III, **4**, c. 20, p. 20.
— substitute. **Delpy.** 17 S. 1861. II, **81**, c. 16, 1, p. 6.
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— **Taylor et Edkins.** 11 O. 1861. II, **81**, c. 16, 1, p. 7.
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— **Toussaint.** 15 Jl. 1856. II, **57**, p. 210.
— for dresses, umbrellas, whips, etc. **Taylor.** 5 O. 1872. III, **3**, c. 16, 1, p. 8.
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for attaching insignia. **Bedeau.** 6 Je. 1865. II, **93**. 67545. t. e.
for ladies' bags, etc. **Pohl.** 25 N. 1859. II, **73**, p. 157.
for ladies' bonnets, toilet articles, etc. **MacCalla.** 12 Mr. 1872. III, **3**, c. 16, 1, p. 2.
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— **Schloss et neveu.** 11 F. 1865. II, **94**. 66205. t. e.
for loose bits of paper. **Gye.** 15 Mr. 1843. I, **67**, p. 111, pl. 12.
for medals or insignia. **Bosch.** 31 Ag. 1869. 86778*.
etc., for sheaths, morocco-leather articles, bags. **Gorbe.** 6 D. 1862. II, **83**, c. 20, p. 27.
for trying on dresses. **Fievet.** 26 F. 1874. III, **10**, c. 16, 3, p. 2, pl. 2.
garter. **Nelli.** 21 Je. 1865. II, **93**. 67779. t. e.
gloves, shoes, etc. **Brookes.** 27 D. 1869. 88273*.
india-rubber. **Lange.** 13 My. 1861. II, **81**, c. 20, p. 6.
jewelry, etc. **Plubeau et Cie.** 13 My. 1873. III, **7**, c. 17, 5, p. 4.
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— **Hue.** 9 Jl. 1845. II, **5**, p. 145, pl. 22.
— **Moiselet.** 18 My. 1830. I, **56**, p. 481, pl. 32.
— **Peyrouze et Cie.** 23 Jl. 1844. I, **62**, p. 12, pl. 2.
making. **Duval.** 9 Ap. 1842. I, **89**, p. 422, pl. 21.
manufacturing and ornamenting. **Taylor.** 11 O. 1864. 64753.
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pressure. **Girardin.** 25 Mr. 1865. II, **94.** 66740. t. e.
purse, bag, etc. **Lucas.** 11 Ag. 1869. 86760*.
puzzle. **Delsarte.** 7 Mr. 1865. 66479.
round or flat. **Gingembre.** 7 Je. 1843. I, **91**, p. 54, pl. 4.
safety. **Hernsheim et Jordan.** 5 N. 1861. II, **84**, c. 12, 1, p. 22.
— **Maréchal.** 12 Je. 1876. III, **18**, i, c. 16, 1, p. 14. 113289. t. e.
— **Pulvermacher.** 23 Mr. 1865. II, **94.** 66717. t. e.
self-opening. **Dugner.** 15 D. 1863. II, **86**, c. 20, p. 8.
shell. **Bertin.** 7 Ap. 1866. 71097*.
steel. **Baumgaertner.** 17 S. 1864. II, **90.** 64467. t. e.
— **Steinmetz.** 25 Ja. 1860. II, **73**, p. 420.
substitute for buckles. **Nurse.** 11 Je. 1866. 71907*.
tubular. **Bresse.** 6 Ap. 1866. 70935*.
universal. **Brouard.** 8 D. 1869. 88111*.
— **Gilot et Baillargeon.** 8 Je. 1870. 90581*
— **Lerchenthal.** 1 Je. 1875. III, **15**, ii. t. e.
— **Perriaux.** 14 S. 1868. 82391*.
— rotary. **Schloss.** 22 F. 1866. 70506*.
with double piston. **Amadou.** 25 Ap. 1872. III, **4**, c. 20, p. 10.
with hook for insignia. **Genatio.** 14 F. 1861. II, **84**, c. 12, 1, p. 22.
with independent pressure. **Pion.** 28 S. 1869. 87321*.
with invisible fastening, for bags, etc. **Perrier.** 19 N. 1864. II, **90**, 65199. t. e.
with label, commercial. **Amilhau.** 20 N. 1869. 87656*.
with lateral pressure. **Scheibel.** 10 Ja. 1865. II, **94.** 65823. t. e.
with open cup for mounting stones, pearls, etc. **Saysel.** 21 Ag. 1865. II, **94.** 68474. t. e.
with piston, for jewelry, etc. **Spindler.** 8 Mr. 1873. III, **7**, c. 17, 5, p. 2.
with screw rings **Spindler.** 27 F. 1868. 79761*.
with screwed ring for jewelry, watches, etc. **James.** 6 N. 1873. III, **7**, c. 17, 5, p. 4.
with spring, for collars, ties, braces, etc. **Wolff.** 4 Je. 1870. 90172*.
without solder, for garments. **Boudot.** 14 N. 1840. I, **75**, p. 123, pl. 10.

CLAVICHORDS, apparatus applicable to. **Vergnes.** 13 Ag. 1864. II, **90.** 60107. t. e.

CLAVI-HARP. **Dietz et Second.** 18 F. 1814. I, **11**, p. 15, pl. 1.

CLAW to mark movable stamps. **Fevrier.** 9 Mr. 1874. III, **10**, c. 18, 2, p. 13.

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and earth, grinding. **Bouquet.** 29 My. 1857. II, **45**, p. 123.
artificial stone, metal, etc., for building. **Smithett.** 5 N. 1864. II, **90.** 65037. t. e.
boring machine. **de Mories.** 11 Ap. 1855. II, **47**, p. 106, pl. 28.
etc., burning. **Augereau-Justeau.** 24 S. 1863. II, **86**, c. 13, 2, p. 8.
cutting mill. **Hembise.** 24 Ap. 1866. 71332*.
etc., drying and mixing. **Grimshaw.** 5 Ja. 1861. II, **82**, c. 13, 1, p. 1.
extractor for pottery. **Favreau.** 27 Ja. 1825. I, **23**, p. 195, pl. 26.
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— **Thivole.** 6 Ap. 1865. II, **44**, p. 328.
for bricks, tiles, etc., cutting and molding. **Jochum.** 19 Ja. 1870. 88634*.
for building walls, baked. **Fonrouge.** 22 N. 1838. I, **44**, p. 280.
for carpets and sculpture, designs in. **Bootz-Laconduite.** 4 Ap. 1857. II, **60**, p. 391.
for pipes, Spanish white, etc. **Guilmette.** 6 Ap. 1864. II, **89.** 62552. t. e.
for pottery, conglomerating. **Pouchol.** 24 My. 1873. III, **7**, c. 13, 1, p. 9.
for pottery, drying. **Lebeuf et Milliet.** 25 Ap. 1857. II, **61**, p. 164.
for pottery, preparing and using. **Berthoud.** 5 Jl. 1864. II, **90.** 63586. t. e.
for pottery, washing. **Decaux.** 23 Ap. 1862. II, **82**, c. 13, 1, p. 4.

CLAY—continued.
grinding cylinder. **Leclerc-Dupuy.** 11 D. 1845. II, **5**, p. 231.
hardening baked. **Clémandot.** 15 S. 1866. 72923*.
kneading machine. **Murray et Jennings.** 13 O. 1866. 73269*.
— **Tritschler.** 20 Je. 1874. III, **11**, ii, c. 13, 2, p. 3, pl. 2.
machine for drawing or stretching hard or soft. **Blot.** 10 My. 1875. III, **15**, i, c. 13, 1, p. 7.
machine for working. **Wade.** 7 D. 1864. II, **90.** 65417. t. e.
mill. **Gonnon.** 1 Jl. 1861. II, **81**, c. 13, p. 9.
— **Leclerc.** 29 O. 1861. II, **81**, c. 13, p. 9.
— **Muller.** 3 Ap. 1861. II, **81**, c. 13, p. 8.
mold. **Moreau.** 12 Jl. 1869. 85979*.
molding, for pottery, pipes, etc. **Sertier.** 2 Jl. 1862. II, **82**, c. 13, 1, p. 4.
molding machine. **Hick.** 12 Je. 1871. III, **1**, c. 13, 1, p. 7.
paste fire-proof. **Schindler.** 14 Jl. 1865. II, **86**, c. 13, 2, p. 7.
peat, etc., machine for molding and pressing. **Fairburn et Johnson.** 27 Jl. 1867. 76922*.
pipe. **Deportes.** 1 Mr. 1858. II, **67**, p. 53.
— **Desgranges.** 24 D. 1866. 74257*.
— **Gaillon.** 30 Ap. 1873. III, **9**, c. 7, 1, p. 7.
— **Jean.** 11 D. 1862. II, **82**, c. 13, 1, p. 5.
— **Jouannet.** 28 My. 1859. II, **71**, p. 323.
— **Leygonie.** Mr. 18, 1870. 89135*.
— **Pichat.** 3 Mr. 1869. II, **74**, p. 171.
— **Reichenecker.** 29 Ag. 1846. II, **8**, p. 196.
— **Robinson et Spencer.** 24 Ag. 1861. II, **81**, c. 13, p. 9.
— brick, tile, etc., machine for. **Whitehead.** 25 Mr. 1875. III, **15**, i, c. 13, 1, p. 7, pl. 2.
— draw-plate to manufacture. **Berger.** 11 My. 1866. 71451*.
— for building. **Malherbe.** 14 Ap. 1864. II, **96**, 62678. t. e.
— for protecting vines. **Tarin.** 3 N. 1874. III, **10**, c. 1, 3, p. 10.
— for pugging floors. **Henchard.** 13 N. 1868. 83188*
— for telegraph wires, etc. **Desgaffe.** 21 Ap. 1860. II, **76**, p. 127, pl. 30.
— joint. **Gilliot et Ungerer.** 8 Ja. 1859. II, **70**, p. 128.
— machine. **Laforce.** 31 Ja. 1862. II, **82**, c. 13, 1, p. 3.
— — **Verdier.** 16 Ap. 1866. 71257*.
— press and steam-engine for manufacturing. **Bricq.** 29 My. 1868. 80863*.
— with iron joints, for water, gas, etc. **Orioli.** 8 Ap. 1864. II, **90.** 62624. t. e.
plaster, lime, porous stone, etc., carbonizing. **Smith.** 24 Je. 1873. III, **9**, c. 7, 1, p. 9.
press. **Fénéon.** 30 Ap. 1866. 71271*.
purifying Armenian. **Chaumonnot.** 19 Ag. 1833. I, **37**, p. 200.
tempering. **Lieutard.** 23 Je. 1855. II, **50**, p. 80, pls. 21, 22.
treatment. **Cochran.** 10 Ja. 1865. II, **94**, c. 13, 2, p. 1, pl. 1. 65805.
triturating machines for pottery. **Marcel.** 20 Je. 1868. 81407*.
washing and tempering for pottery. **George.** 22 Ap. 1829. I, **28**, p. 72, pl. 19.
working. **Brethon.** 18 Ja. 1860. II, **73**, p. 361.

CLEANER. (*See also* Boiler, Boot, Card, Carpet, Cartridge, Chimney, Clothes, Comb, Cotton, Flax, Floor, Fork, Grain, Knife, Ore, Railway, Shoe, Silk, Steam, Tube, Window, Wool.)
and scourer. **Degalle.** 18 F. 1856. II, **54**, p. 253.
— **Jérome** 19 Mr. 1856. II, **54**, p. 183.

CLEANING apparatus. **Outrequin, fils.** 28 My. 1864. II, **92.** 63140. t. e.
compounds manufacture and envelopes for. **Gamondes.** 2 D. 1867. 78760*
machine, for rice, coffee, etc. **Ladd.** 4 D. 1861. II, **80**, c. 1, 1, p. 19.
powder. **Lacalm et Guyot.** 15 O. 1866. 73267*.
— **Michel.** 29 O. 1866. 73337*.

CLEARING land, instrument for. **Fissore.** 17 S. 1869. 87208*.

CLEAT or wedge for mine cages. **Libotte.** 30 Mr. 1867. 75819*.

CLICK and spring work. **Brisbart-Gobert.** 12 My. 1838. I, **67**, p. 387, pl. 34.
CLIMBER. **Frédureau.** 19 O. 1864. II, **91.** 64837. t. e.
CLIMBING spurs for collecting fir-resin. **Darribère.** 2 Mr. 1866. 70519*.
CLIPPING and shearing animals, apparatus for. **Adie.** 24 S. 1875. III, **14**, i, c. 1, 1, p. 52. 109669.
— **Clark.** 21 Jl. 1869. 86882*.
— **Closson.** 5 O. 1871. III, **1**, c. 2, p. 13.
— **Courtois.** 12 O. 1869. 87401.
— **Davis.** 27 Jl. 1868. 81837*.
— **Knight.** 30 S. 1869. 87314*.
— **Martin.** 30 N. 1874. III, **10**, c. 1, 1, p. 75, pl. 26.
— **Martin.** 27 Ja. 1875. III, **14**, i, c. 1, 1, p. 19. 106612.
— **Maynard.** 6 Je. 1865. II, **94.** 67594. t. e.
— **Ottenheim.** 14 S. 1869. 87190*.
— **Tidmarsh.** 28 My. 1869. 85821*.
iron. **Waterman.** 3 Ag. 1866. 72504*
machine, horse. **Bouquet.** 1 Jl. 1869. 85867*.
— etc. **Bown.** 8 S. 1875. III, **14**, i, c. 1, 1, p. 49, pl. 21. 109504.
— **Champenois.** 1 Jl. 1872. III, **5**, c. 10, p. 13.
— **Champenois.** 5 F. 1875. III, **14**, i, c. 1, 1, p. 11, pl. 15. 106701.
— **Clark.** 28 Jl. 1875. III, **14**, i, c. 1, 1, p. 40, pl. 21. 108982.
— **Couhault.** 17 Jl. 1874. III, **10**, c. 1, 1, p. 53, pl. 22.
— **Courtois.** 30 N. 1873. III, **10**, c. 1, 1, p. 74.
— **Courtois.** 30 N. 1874. III, **14**, i, c. 1, 1, p. 6. 105880.
— **Desbordes.** 26 Ag. 1873. III, **10**, c. 1, 1, p. 82.
— **Desbordes.** 21 Ja. 1874. III, **10**, c. 1, 1, p. 6, pl. 26.
— **Ducom.** 12 Mr. 1875. III, **14**, i, 1. 107164. t. e.
— **Godier-Crispin et Roman.** 23 F. 1875. III, **14**, i. 106900. t. e.
— **Holyoake et Brown.** 11 My. 1874. III, **10**, c. 1, 1, p. 42, pl. 22.
— **Laisné.** 1 Jl. 1875. III, **14**, i, c. 1, 1, p. 39. 108633.
— **Pegues.** 9 N. 1874. III, **10**, c. 1, 1, p. 85.
— **Platon.** 23 Ap. 1873. III, **10**, c. 1, 1, p. 32, pl. 23.
— **Salom.** 11 D. 1869. 88167*.
shears. **Bate.** 7 Je. 1876. III, **18**, i, c. 1, 1, p. 38, pl. 8. 113301.
— **Baumgarten.** 29 Ag. 1876. III, **18**, i, c. 1, 1, p. 45, pl. 18. 114320.
— **Bétis et Cretin.** 5 Ag. 1876. III, **18**, i, c. 1, 1, p. 43. 114057.
— **Bétis et Cretin.** 5 Ag. 1876. III, **18**, i, c. 1, 1, p. 43, pl. 21. 114058.
— **Clark.** 21 O. 1876. III, **18**, i, c. 1, 1, p. 52, pl. 19. 115187.
— **Gelis et Cie.** 13 Jl. 1876 III, **18**, i, c. 1, 1, p. 68. 113805. t. e.
— **Laronde et Louvier.** 23 O. 1876. III, **18**, i, c. 1, 1, p. 69. 115166. t. e.
CLOAK. **Beck.** 19 S. 1821. I, **13**, p. 351.
and other outer garment. **Calvert et Robertson.** 1 F. 1867. 74750*.
bearer, cleaning clothes. **Roux.** 2 My. 1855. II, **45**, p. 253.
etc., felt and seamless. **Merlent.** 4 Je. 1860. II, **75**, p. 132.
ladies. **Savardeix.** 29 My. 1872. III, **3**, c. 16, 3, p. 14.
pin. **Drucker, Lippold et Gonsse.** 14 Ag. 1865. II, **94.** 68398. t. e.
— movable. **Rey.** 22 Mr. 1869. 84900*.
with cover convertible into hood. **Bourdon.** 17 N. 1870. 91289*.
CLOCK. **Augé et Foubert.** 22 Ag. 1862. II, **84**, c. 12, 1, p. 24.
Bailly-Maître. 10 Je. 1850. II, **17**, p. 289.
Baussan. 12 S. 1857. II, **63**, p. 293.
Beranger. 14 Jl. 1852. II, **27**, p. 105, pl. 21.
Boudin. 8 Je. 1836. I, **40**, p. 26, pl. 3.
Bourdon. 25 O. 1876. III, **19**, i, c. 12, 1, p. 13, pl. 5. 115185.
Cadot. 27 Je. 1876. III, **19**, i, c. 12, 1, p. 27. 113502. t. e.
Callaud. 5 O. 1838. I. **44**, p. 148, pl. 7.
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Carpenter et Martin. 18 N. 1876. III, **19**, i, c. 12, 1, p. 28. 115584. t. e.
Coulon fils. 17 N. 1868. 83249*.
Fahy. 6 S. 1876. III, **19**, i, c. 12, 1, p. 27. 114459. t. e.

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Farcot. 1 Mr. 1876. III, **19**, i, c. 12, 1, p. 1, pl. 1. 107030.
Frigerio. 2 Ag. 1858. II, **68**, p. 304.
Gache. 24 D. 1834. I, **35**, p. 166, pl. 25.
Girard. 13 Je. 1864. 63294.
Guilmet. 30 O. 1867. 78311*
Guilmet. 13 Ja. 1876. III, **19**, i, c. 12, 1, p. 25. 111036. t. e.
Guilmet. 26 S. 1876. III, **19**, i, c. 12, 1, p. 27. 114729. t. e.
Harmey. 15 D. 1866. 74136*.
Hermite. 15 F. 1875. III, **15**, ii. t. e.
Japy et Cie. 9 F. 1876. III, **19**, i, c. 12, 1, p. 2, pl. 2. 111401.
Jehlin. 6 My. 1876. III, **19**, i, c. 12, 1, p. 26. 112726. t e.
Lahmeyer et Franchette. 23 O. 1874. III, **11**, ii, c. 12, 1, p. 13, pl. 4.
Landré. 29 Ap. 1862. II, **84**, c. 12, 1, p. 23.
Laurendeau. 27 Je. 1857. II, **63**, p. 345, pl. 58.
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Malfait. 29 Ja. 1876. III, **19**, i, c. 12, 1, p. 26. 111244. t. e.
Maurel. 31 D. 1868. 83749*
Monot. 13 Mr. 1862. II, **84**, c. 12, 1, p. 23.
Montandon. 3 Ja. 1861. II, **81**, c. 12, p. 2.
Neuens. 14 O. 1844. II, **1**, p. 131, pl. 31.
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Orset et Dumyrat. 13 Ja. 1863. II, **86**, c. 9, 2, p. 10.
Panisset. 28 F. 1852. II, **22**, p. 70.
Pereira. 12 S. 1866. 72908*.
Perreux. 7 Ja. 1862. II, **84**, c. 12, 1, p. 23.
Petry. 13 Mr. 1854. II, **36**, p. 29.
Polynice. 25 Ja. 1865. II, **94.** 66009. t. e.
Raingo frères. 9 My. 1829. I, **26**, p. 268.
Redier. 30 Ap. 1856. II, **58**, p. 104, pl. 9.
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Ritchie. 24 S. 1872. III, **4**, c. 12, 1, p. 23.
Romanet. 4 N. 1845. II, **5**, p. 203.
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Rosset. 4 D. 1876. III, **19**, i, c. 12, 1, p. 28. 115838. t. e.
Terrien et Robert. 8 O. 1872. III, **4**, c. 12, 1, p. 11, pls. 2–3.
Van Tenac. 13 My. 1876. III, **19**, i, c. 12, 1, p. 26. 112903. t. e.
Verdier. 21 Mr. 1859. II, **70**, p. 399.
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— **Guimbert.** 23 Ap. 1863. II, **88**, c. 4, 2, p. 48.
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— — **Bourges.** 10 N. 1865. II, **96**. 69174. t. e.
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— **Crozet.** 15 My. 1824. I, **17**, p. 169.
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— **Fabré.** 19 Ap. 1817. I, **9**, p. 341.
— **Langier père et fils.** 5 O. 1812. I, **7**, p. 132.
— **Marie.** 17 O. 1821. I, **13**, p. 354.
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— **Tongue.** 10 Je. 1865. II, **96**, c. 4, 1, p. 27, pls. 8–10. 67693.
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— — **Batinnson et Whitehead.** 10 Je. 1869. 85995*
— — **Bruneaux.** 4 Jl. 1842. I, **89**, p. 561.
— — **Bruneaux et Demormand.** 14 Ag. 1840. I, **49**, p. 61, pl. 6.
— — **Cockerill.** 31 Jl. 1840. I, **86**, p. 496, pl. 29.
— — **Donisthorpe.** 7 Ap. 1865. II, **96**, c. 4, 1, p. 21, pl. 4. 66928.
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— **Froust.** 2 Jl. 1867. 76992*.
— **Heath.** 6 Mr. 1823. I, **37**, p. 417, pl. 35.
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— **Lemoine.** 9 N. 1836. I, **63**, p. 90, pl. 8.
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— **Pirotte.** 2 Jl. 1860. II, **77**, p. 371, pl. 46.
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— **Thorold.** 26 O. 1864. II, **91**. 64915. t. e.
— **Vivet.** 5 My. 1868. 80822*.
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— — **MacCarter.** 30 Jl. 1870. 90792*.
— — **Maineult.** 28 D. 1867. 78829*.
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— — **Parry.** 6 S. 1865. II, **95**, c. 5, 1, p. 12, pl. 5. 68633.
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— **Godin.** 26 Jl. 1875. III, **15**, i. c. 15, 2, p. 48, pl. 13.
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— **Gosteau.** 5 N. 1869. 87739*.
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— **Méjean-Fumat.** 19 Jl. 1865. II, **94**, c. 9, 1, p. 2. 68064.
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— **Waygood.** 14 S. 1868. 82402*.
— and gasometer. **Boussemart.** 27 My. 1870. 89954*.
— camp. **Oswald-Dollfus.** 29 N. 1871. III, **2**, c. 11, p. 134.
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— coal oil. **Stark.** 28 Mr. 1876. III, **19**, i, c. 9, 1, p. 29. 112108. t. e.
— feeder. **Hélie.** 11 Ag 1875. III, **15**, i. t. e.
— fish. **Faucheux.** 14 D. 1867. 78759*.
— for animal matter. **Craven.** 2 My. 1873. III, **7**, c. 15, 3, p. 60.
— for cattle feed. **Fouché.** 27 N. 1872. III, **3**, c. 1, 1, p. 34.
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— — **Cavalli.** 27 S. 1860. II, **77**, p. 245.
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— — **Frénais de Coutard.** 15 F. 1876. III, **21**, ii, c. 11, 3, p. 1. 111530.
— — **Geneste, Herscher et Cie.** 22 S. 1876. III, **21**, ii, c. 11, 3, p. 3, pl. 1. 114667.
— — **d'Hardivilliers.** 13 Jl. 1876. III, **19**, i, c. 9, 1, p. 31. 113738. t. e.
— — **Labbé.** 17 F. 1876. III, **21**, ii, c. 11, 3, p. 2, pl. 1. 111565.
— — **Muhel.** 27 Jl. 1870. 90758*.
— — steam. **Fraise.** 24 D. 1870. 91132*
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— — **Boblet-Gipoulon.** 30 D. 1820. I, **10**, p. 366.
— — **Égrot.** 19 D. 1863. II, **90**, c. 9, 1, p. 1, pl. 1. 61212.
— — **Égrot.** 30 D. 1876. III, **19**, i, c. 12, ii, p. 45, pl. 3. 116213.
— — **Fouché.** 22 N. 1875. III, **14**, i, c. 1, 3, p. 21, pl. 3. 110407.
— — **Lemare.** 29 D. 1825. I, **32**, p. 270, pl. 39.
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— **Goepfert.** 15 Ja. 1876. III, **19**, i, c. 9, 1, p. 28. 111102. t. e.
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burial. **Rosiès.** 4 Mr. 1869. 84448*.
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— for weapons and games. **d'Argy.** 24 N. 1865. II, **96**. 69478. t. e.
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movable. **Barret.** 23 D. 1876. III, **20**, i, c. 6, 4, p. 5, pls. 2, 3. 116012.
— **Billotte.** 25 Jl. 1872. III, **5**, c. 7, 2, p. 9.
— **Champonnois.** 18 My. 1838. I, **81**, p. 215, pl. 19.
— **Doucet.** 2 D. 1876. III. **20**, i, c. 6, 4, p. 4, pl. 1. 115719.
— **Languet.** 19 My. 1875. III, **16**, ii, c. 6, 4, p. 15. 107700.
— **de Louvois.** 13 Je. 1837. I, **64**, p. 305, pl. 29.
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raising. **Bel.** 26 My. 1855. II. **49**. p. 178, pl. 42.
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— **Conte.** 26 My. 1862. II, **84**, c. 6, 4, p. 6, pl. 1.
DAMASK. **Pramondon.** 8 Mr. 1875. III, **17**, c. 4, 3. 106912. t. e.
DAMASKEENED work, imitating. **Baude.** 10 Mr. 1868. 80454*.
DAMASKEENING and inlaying metals. **Morel et Duponchel.** 7 O. 1842. I, **79**, p. 49.
electro-chemical imitation. **Petitjean.** 19 My. 1863 II, **86**, c. 17, 1, p. 9.
iron and steel. **Zuloaga.** 2 S. 1876. III, **19**, ii, c. 17, 5, p. 5. 114418.
DAMPENING apparatus. **Leclerc.** 24 O. 1864. II, **90**. 64871. t. e.
— for labels, postage-stamps, etc. **Ané et Lère.** 6 Mr. 1874. III, **10**, c. 18, 2, p. 13.
DAMPER, steam-boiler flue. **Ripley.** 26 S. 1862. II, **82**, c. 5, 2, p. 44.
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— teaching. **Pereire.** 27 S. 1875. III, **15**, ii, c. 12, 3, p. 12, pl. 2.
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Saint Martin et Liézard. 8 N. 1859. II, **73**, p. 35.
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ice water, etc. **Robatel fils.** 11 Ap. 1870. 89433*.
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DECANTING and filtering water of rivers, etc. **Varini et Lieutaud, jeune.** 18 N. 1865. II, **94**. 69897. t. e.
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— centrifugal. **Duvergier.** 21 O. 1865. II, **96**. 68998. t. e.
— liquid. **Drivon.** 12 F. 1864. II, **89**. 61723. t. e.
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Dauberboc. 26 Je. 1875. III, **15**, ii. t. e.
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— **Ritouret.** 10 Mr. 1864. II, **90**, c. 12, 3, p. 1. 62903.
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— **Cicile-Larbre.** 1 Ap. 1868. 79988*.

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and press. **Allan.** 5 N. 1869. 87723*.
— **Farjon.** 19 S. 1862. III, **3**, c. 18, 2, p. 12.
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— for large chimneys. **Pezou.** 1 Mr. 1864. II, **92**. 62147. t. e.
— for linen, hemp, etc. **Jarosson et Bastaert.** 11 Je. 1866. 71897*.
— for yarn. **Béranger.** 6 F. 1868. 79296*.
— — and tissues. **Vetillard.** 20 D. 1852. II, **29**, p. 164, pl. 33.
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— manufacture. **Wolff et Betley.** 6 Ja. 1876. III, **18**, ii, c. 14, 2, p. 3. 110989.
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— **Marelli.** 22 S. 1871. III, **2**, c. 11, p. 113, pl. 32.
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— **Marsh.** 6 Ja. 1862. II, **84**, c. 11, 1, p. 29.
— **Marston.** 17 Ag. 1852. II, **27**, p. 107, pl. 21.
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— **von Martini.** 15 S. 1871. III, **2**, c. 11, p. 112, pl. 30.
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— **Marval.** 26 Mr. 1873. III, **9**, c. 11, 1, p. 15.
— **Massa, Panzarasa et Andreani.** 11 N. 1869. 87816*.
— **Massiquot.** 24 D. 1870. 91372*.
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— **Matthews.** 22 N. 1866. 73764*.
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— **Mauduit.** 1 D. 1870. 91107*.
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— **Mekarski et Studler.** 18 Mr. 1874. III, 13, c. 11, 1, p. 21, pl. 1.
— **Mercier y Espejo.** 10 F. 1868. 79532*.
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— **Milbank.** 20 O. 1871. III, **2**, c. 11, p. 120, pl. 24.
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— **Minié.** 29 N. 1864. II, **92**, c. 11, 1, p. 23, pl. 7. 65383.
— **Minié.** 20 Ja. 1865. II, **96**. 65937. t. e.
— **Minié.** 13 Ap. 1865. II, **96**. 67002. t. e.
— **Minié.** 20 Ap. 1867. 76148*.
— **Ministère de la Guerre du royaume d'Italie.** 6 Ag. 1869. 86733*.
— **Moisse et Grandjean.** 29 My. 1875. III, **17**, c. 11, 1, p. 21, pl. 1. 108233.
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— **Morisseau.** 10 Ag. 1863. II, **88**, c. 11, 1, p. 29.
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— **Peabody.** 20 My. 1865. II, **96**. 67415. t. e.
— **Peabody.** 9 Ag. 1869. 86736*.
— **Pelichet.** 14 Je. 1875. III, **17**, c. 11, 1, p. 22, pl. 11. 108401.
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— — **Prud'homme.** 7 F. 1868. 79784*.
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— **Gérandeau.** 27 Mr. 1862. II, **87**, c. 5, 8, p. 4.

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— **Héral.** 18 Mr. 1864. II, **91**. 62800. t. e.
— **Jacob.** 21 S. 1876. III, **20**, ii, c. 5, 8, p. 27. 114671. te.
— **Joret.** 20 Je. 1861. II, **80**, c. 5, 3, p. 30.
— **Kirkwood, Lascelles et Hall.** 22 Ja. 1875. III, **16**, i, c. 5, 8. 108494. t. e.
— **La compagnie Parisienne d'éclairage et de chauffage par le gaz.** 8 Jl. 1867. 77047*.
— **La compagnie Parisienne d'éclairage et de chauffage par le gaz.** 11 D. 1867. 78810*.
— **La compagnie Parisienne d'éclairage et de chauffage par le gaz.** 8 Mr. 1871. III, **2**, c. 5, 3, p. 1, pl. 1.
— **Lapène.** 26 Ap. 1859. II, **71**, p. 201.
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— **Million.** 8 Je. 1857. II, **63**, p. 86, pl. 17.
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— **Paillard.** 18 Ap. 1876. III, **20**, ii, c. 8, 8, p. 26. 112264. t. e.
— **Perdikidi.** 14 F. 1870. 88538*.
— **Perrousset.** 20 Ja. 1874. III, **12**, c. 5, 8, p. 22.
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— **Samuel.** 1 Jl. 1868. 81543*.
— **Sautel.** 23 Ja. 1868. 79319*.
— **Siemens.** 28 F. 1861. II, **80**, c. 5, 3, p. 8.
— **Société de fabrication des machines Humboldt.** 14 Je. 1875. III, **16**, i, c. 5, 8, p. 11, pl. 4. 108407.
— **Société des moteur Lambrigot.** 25 F. 1875. III, **16**, i, c. 5, 8, p. 7. 106982.
— **de Soulages.** 27 Jl. 1871. 91214*.
— **Sthurler.** 29 Ap. 1865. II, **95**. 67106. t. e.
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— carbonic acid. **Bonin.** 9 My. 1857. II, **63**, p. 118.
— — **Christin.** 5 Jl. 1875. III, **16**, i, c. 5, 8. 108622. t. e.
— — **Cristin.** 2 N. 1867. 78168*.
— — **Debruges dit Lebaillif.** 17 N. 1869. 87865*.
— — **Ghilliano et Cristin.** 29 Mr. 1856. II, **54**, p. 343.
— — **Mauvrel Lagrange.** 31 D. 1860. II, **78**, p. 289.
— — **Robin.** 14 F. 1865. II, **95**. 66173. t. e.
— — **Robin.** 6 Jl. 1868. 81542*.
— — **Robin.** 30 Ag. 1869. 87025*.
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— double action. **Masières.** 16 S. 1867. 77838*.
— expansion. **Kaeuffer et Mandl.** 5 S. 1865. II, **95**. 68621. t. e.
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— — **Boulton.** 5 O. 1876. III, **20**, ii, c. 5, 8, p. 27. 114854. t. e.
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Willoughby. 7 O. 1840. I, **87**, p. 310, pl. 19.
and hook self-bending apparatus. **Javal.** 24 F. 1862. II, **82**, c. 5, 5, p. 34.
and loop. **Abraham.** 26 F. 1869. 84626*.
— plate. **Brion.** 23 O. 1871. III, **2**, c. 9, 2, p. 10, pl. 3.
and pin. **Poole.** 30 N. 1840. I, **74**, p. 422, pl. 30.
and pivot for kitchen-ranges, stoves, etc. **Collet.** 17, N. 1866. 73518*.
and plate. **Closson.** 11 D. 1865. 78692*.
— **La Chaussée.** 2 D. 1864. II, **90**, c. 9, 2, p. 21, pl. 5. 65285.
— for doors and windows. **Pigeot.** 30 D. 1865. II, **95**, c. 5, 5, p. 52, pl. 1. 69891.
and staple, door. **Bernier-Degorque.** 2 N. 1850. II, **21**, p. 94, pl. 20.
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carriage. **Baron.** 4 Ap. 1870. 89307*.
— **Cosson et Lepault.** 18 Mr. 1859. II, **70**, p. 397.
— bi-metallic. **Joseph et Maré.** 1 Je. 1866. 71776*
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— etc., invisible. **Cival dit Laserve.** 20 Ja. 1869. 84055*
— twisted. **Chevalier.** 1 Je. 1869. 85869*.
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— **Dardenne-Bourguignon.** 12 Je. 1876. III, **19**, i, c, 9, 2, p. 18, pl. 7. 113802.
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— — **Hénon-Hénon.** 25 N. 1865. II, **94**. 69413. t. e.
— — **Hivert-Jardinier.** 7 N. 1867. 78181*.
— — **Roynette-Hénon.** 13 D. 1867. 78675*.
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— rolled iron. **Roynette-Hénon.** 7 Ja. 1862. II, **83**, c. 9, 2, p. 1.
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Davis. 27 O. 1876. III, **20**, ii, c. 5, 6, p. 9. 115218. t. e.
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Gargan. 19 N. 1873. III, **8**, i, c. 5, 6, p. 8, pl. 3.
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Laffas. 21 N. 1863. II, **87**, c. 5, 6, p. 11, pl. 7.
Leblanc. 28 S. 1876. III, **20**, ii, c. 5, 6, p. 9. 114767. t. e.
Lemoine. 23 Ap. 1867. 76184.
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Mégy. 20 N. 1867. 78476*.
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Monlien de Perthon. 5 D. 1876. III, **20**, ii, c. 5, 6, p. 7, pl. 1. 115859.
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for building materials. **Boué.** 7 D. 1868. 83454*.
— **Charpentier.** 26 O. 1868. 82964.
— **Delgorge.** 11 Ag. 1868. 81985*.
— **Fosse.** 9 N. 1876. III, **21**, ii, c. 7, 3, p. 22, pl. 5. 115422.
— **George.** 4 S. 1865. II, **95**, c. 5, 6, p. 5, pl. 2. 68588.
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— **George.** 11 O. 1872. III, **5**, c. 5, 6, p. 11, pl. 5.
— **Mathys.** 17 Jl. 1867. 77164*.
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for raising loads. **Andrews.** 12 Ap. 1872. III, **5**, c. 5, 6, p. 2, pl. 7.
for solid bodies. **Hesme.** 29 Ja. 1868. 79255*.
hydraulic. **Mignon et Rouart.** 14 N. 1871. III, **2**, c. 7, 3, p. 15, pl. 1.
— **Rapeaud.** 4 D. 1869. 88100*.
— brake for mine. **Villiers.** 9 D. 1876. III, **18**, i, c. 8, 1, p. 25, pl. 6. 115874.
— centrifugal. **Tabourin.** 2 N. 1866. 73405*.
— mine. **Owen.** 29 Ap. 1874. III, **10**, c. 8, 1, p. 15, pls. 3, 3 *bis*.
portable. **Wonlarlarsky.** 7 S. 1870. 90927*.
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rotary. **Bohin.** 15 My. 1865. II, **94**. 67359. t. e.
safety-catch. **Cousin.** 9 My. 1875. III, **18**, i, c. 8, 1, p. 31. 103115. t. e.
— mine. **Clair.** 29 Ja. 1876. III, **18**, i, c. 8, 1, p. 3. 111093.
— — **Eickhoff.** 30 N. 1876. III, **18**, i, c. 8, 1, p. 24, pl. 8. 115790.
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telodynamic transmission for. **Leblond et Moulot.** 18 Ag. 1869. 86789*.
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with self-acting hooks. **Compagnie Parisienne d'éclairage par le gaz.** 28 D. 1866. 74689*.
worked by feet. **Maldant.** 22 Jl. 1869. 86572*.
HOISTING and loading apparatus. **von Swaine.** 15 S. 1876. III, **20**, ii, c. 5, 6, p. 9. 114582. t. e.
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beer vats. **Kolb.** 12 Ap. 1876. III, **18**, ii, c. 14, 6, p. 11, pl. 4. 112166.
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HOLDER. **Buignier.** 14 O. 1864. II, **90**. 64765. t. e.
Lemonnier et Storer. 7 My. 1868. 80807*.
HOLE-DIGGER for cane-planting. **Rolland.** 4 N. 1869. 88037*.
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Aumoitte. 19 My. 1865. II, **93**. 67391. t. e.
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— **Bouland.** 6 Jl. 1865. II, **93**. 67950. t. e.
— **Boyer.** 14 S. 1864. II, **89**. 64439. t. e.
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— **Eyras.** 7 N. 1863. II, **85**, c. 16, 3, p. 5.
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— **Morissoneau**. 16 F. 1876. III, **18**, i, c. 1, 1, p. 9. 111409.
— **Vicat**. 13 S. 1873. III, **6**, c. 1, 1, p. 21.
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— **Blanchard**. 15 Je. 1869. 85703*
— **Genest**. 4 Ag. 1874. III, **10**, c. 1, 2, p. 19. t. e.
— **Lecherpin**. 28 Ja. 1874. III, **10**, c. 1, 2, p. 3.
— **Lemaire**. 2 My. 1865. II, **93**. 67126. t. e.
— liquid. **Vicat**. 28 F. 1874. III, **10**, c. 1, 2, p. 3.
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— **Hembert**. 13 Jl. 1876. III, **18**, i, c. 1, 2, p. 17. 113972. t. e.
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— **Constans et Cassagnes**. 23 Je. 1866. 71924*.

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— **Delrieu.** 21 Mr. 1870. 89092*.
— **Dirrix.** 16 My. 1867. 76173*.
— **Fabert.** 1 D. 1864. II, **89**. 65281. t. e.
— **Fichet.** 10 Jl. 1872. III, **3**, c. 1, 2–3, p. 16.
— **Grison.** 27 Ap. 1866. 71255*.
— **Guillermin.** 28 My. 1870. 90086*.
— **Guillet.** 24 Ap. 1866. 71236*.
— **Hartmann.** 5 Mr. 1866. 70661*.
— **Hervillard.** 15 O. 1866. 73295*.
— **Laferrière et Fournier.** 21 F. 1876. III, **19**, ii, c. 20, p. 30. 111468. t. e.
— **Lerouge et Bellier.** 20 My. 1863. II, **85**, c. 1, 2, p. 4.
— **Mizermon.** 13 Ag. 1874. III, **10**, c. 1, 2, p. 12.
— **Portal et Couture.** 3 Ap. 1868. 80089*.
— **Saudemont.** 7 Mr. 1864. II, **89**. 62026. t. e.
— and mineral. **Demons et Andrieux.** 28 Je. 1866. 72119*.
— or powder. **Fichet.** 5 O. 1875. III, **14**, i. 109844. t. e.
— sprayer. **Godumet.** 12 S. 1873. III, **6**, c. 1, 2, p. 18.
— sulphurous. **Querey.** 4 My. 1864. II, **89**. 62930. t. e.
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— **Dauzon et Rostand.** 7 Je. 1861. II, **81**, c. 18, 1, p. 8.
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— **Roth.** 28 Ap. 1846. II, **6**, p. 211.
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— **Barral.** 8 Jl. 1872. III, **3**, c. 1, 2–3, p. 8.
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— **Cauvy.** 12 Mr. 1875. III, **14**, ii, c. 14, 1, p. 11. 106929.
— **Cauzique.** 30 S. 1874. III, **10**, c. 1, 2, p. 19.
— **Cavagna.** 22 D. 1875. III, **18**, i, c. 1, 2, p. 16. 111491. t. e.
— **Chappaz.** 17 Ag. 1875. III, **14**, i. 109113. t. e.
— **Charmet.** 19 Ag. 1871. III, **1**, c. 1, 2, p. 10.
— **Collet.** 3 F. 1876. III, **18**, i, c. 1, 2, p. 7. 111324.
— **Collin.** 26 Ja. 1874. III, **10**, c. 1, 2, p. 1.
— **Condat.** 18 Mr. 1873. III, **6**, c. 1, 2, p. 18.
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— **Debruge.** 3 D. 1874. III, **10**, c. 1, 2, p. 19.
— **Dubois.** 29 O. 1875. III, **18**, i, c. 1, 3, p. 8. 112132. t. e.
— **Dulac.** 18 N. 1876. III, **18**, i, c. 1, 2, p. 17. 115555. t. e.
— **Durand et Monestrol.** 5 Mr. 1874. III, **10**, c. 1, 2, p. 3.
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— **Havel.** 19 D. 1876. III, **18**, i, c. 1, 1, p. 14. 116053.
— **Héricart de Thury.** 16 My. 1872. III, **3**, c. 1, 2–3, p. 7.
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— **Joannis-Petit et Cie.** 12 S. 1872. III, **10**, c. 1, 2, p. 15.
— **Jolivet.** 21 N. 1876. III, **18**, i, c. 1, 2, p. 17. 115495. t. e.
— **Julien.** 9 S. 1873. III, **6**, c. 1, 2, p. 8.
— **Lachat-Guérin.** 28 Ja. 1875. III, **14**, i. 106342. t. e.
— **Lachner.** 24 F. 1876. III, **18**, i, c. 1, 2, p. 16. 111467. t. e.
— **Langlade.** 30 Jl. 1873. III, **6**, c. 1, 2, p. 8.
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— **Laureau.** 5 Ja. 1876. III, **18**, i, c. 1, 2, p. 2. 110906.
— **Lesault et Régnier.** 5 Jl. 1876. III, **18**, i, c. 1, 2, p. 16. 113625. t. e.
— **Marlin.** 31 Jl. 1874. III, **10**, c. 1, 2, p. 12.
— **Massa.** 19 My. 1875. III, **14**, i. 108130. t. e.
— **Maurgues.** 29 D. 1876. III, **18**, i, c. 1, 2, p. 17. 116134. t. e.
— **Michaud.** 6 My. 1874. III, **10**, c. 1, 2, p. 8.
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— **Moreau.** 19 Ja. 1874. III, **10**, c. 1, 2, p. 2.
— **de Narcillac.** 18 Je. 1874. III, **10**, c. 1, 2, p. 10.
— **Perès.** 11 Ag. 1876. III, **18**, i, c. 1, 2, p. 17. 115233. t. e.
— **Portier et Cahors.** 12 Ag. 1876. III, **18**, i, c. 1, 2, p. 17. 114180. t. e.
— **Pourché.** 14 Ja. 1873. III, **6**, c. 1, 2, p. 1; **14**, i. 97671. t. e.
— **Puyau.** 4 F. 1874. III, **10**, c. 1, 2, p. 1.
— **Regnauld.** 4 Ap. 1874. III, **10**, c. 1, 2, p. 7.
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— **Roussellier.** 20 Jl. 1876. III, **18**, i, c. 1, 2, p. 10. 113846.
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— **Roussier.** 12 O. 1875. III, **14**, i. 110027. t. e.
— **Sabaté.** 22 D. 1875. III, **18**, i, c. 1, 2, p. 2. 110784.
— **Sauvage.** 18 Jl. 1874. III, **10**, c. 1, 2, p. 11.
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— **Tabet.** 11 N. 1876. III, **18**, i, c. 1, 2, p. 17. 115474. t. e.
— **Tessié du Motay.** 20 Ag. 1872. III, **3**, c. 1, 2–3, p. 10.
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— glass. **Camus et Haret.** 16 Jl. 1870. 90678*.
— with stuffing-box. **Vanhomme.** 2 Mr. 1868. 79792*
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— — **Buxtorf.** 1 D. 1864. II, **92**, c. 4, 5, p. 11, pl. 3. 65304.
— — **Cambiaso.** 3 F. 1869. 84272*.
— — **Cotel.** 28 Ap. 1851. II, **22**, p. 159, pl. 36.
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— — **Fouquet.** 24 Mr. 1845. II, **4**, p. 182, pl. 52.
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— — **Herrin.** 7 D. 1867. 78602*.
— — **Jacquin.** 10 Ja. 1850. II, **18**, p. 139, pl. 19.
— — **Joly-Hanotin.** 11 Je. 1864. II, **92**. 63261. t. e.
— — **Lamb et Lowe.** 28 F. 1873. III, **9**, c. 4, 5, p. 3, pl. 4.
— — **Legras et Poitevin.** 18 My. 1843. I, **67**, p. 481, pl. 41.
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— — **Motte.** 14 Ap. 1854. II, **37**, p. 192, pl. 48.
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— — **Tailbouis, Renevey et Touzé.** 16 Ap. 1875. III, **17**, c. 4, 5, p. 13, pl. 9. 107680.
— — **Tailbouis, Renevey, Touzé et Bonamy.** 13 N. 1875. III, **17**, c. 4, 5, p. 20, pl. 9. 110323.
— — **Turquand-Courbe.** 26 Mr. 1855. II, **45**, p. 239, pl. 58.
— — and india-rubber warp for. **Luce-Villiard.** 2 My. 1854. II, **37**, p. 141, pls. 28, 29.
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— — and stripe. **Buxtorf.** 23 F. 1864. II, **92**, c. 4, 5, p. 1, pl. 4. 62205.
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— — rectilinear. **Berthelot.** 1 Jl. 1865. II, **96**. 67820. t. e.
— — stocking. **Berthelot.** 18 Ja. 1864. II, **92**. 61449. t. e.
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— — **Pelletier.** 20 Jl. 1872. III, **5**, c. 4, 5, p. 7, pl. 1.
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— — **Poron.** 21 Ap. 1868. 80247*.
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— **Estrade.** 16 S. 1875. III, **16**, ii, c. 3, 2. 109551. t. e.
— **Fell.** 19 D. 1866. 74201*.
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— **Facon.** 6 O. 1874. III, **13**, c. 4, 3, p. 43.
— **Fargues.** 30 S. 1865. II, **96**. 68839. t. e.
— **Farques.** 21 D. 1876. III, **21**, i, c. 4, 3, p. 54. 116083. t. e.
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— **Florin.** 7 Jl. 1866. 72056*
— **Garde.** 27 F. 1873. III, **9**, c. 4, 3, p. 24, pl. 22.
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— **Isherwood et Tucker.** 5 D. 1871. III, **2**, c. 4, 3, p. 51, pl. 6.
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— — **Seigle.** 11 Mr. 1868. 79759*.
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— **Loiseau et Bedu.** 18 Jl. 1864. 63754*.
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— **Caussemille.** 30 Ja. 1868. 79246*.
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— **Dupluy.** 13 Jl. 1874. III, **10**, c. 1, 1, p. 84; **14**, i. 103970. t. e.
— **Kamienski et de Rottermund.** 1 My. 1865. II, **93**. 67187. t. e.
— **Lallier aîné et fils.** 18 My. 1870. 89870*.
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— **MacCormick et Expelding.** 2 F. 1867. 74799*.
— **Marie.** 31 Ag. 1865. II, **93**. 68563. t. e.
— **Petitlaurent.** 21 Ap. 1864. III, **14**, i. 103458. t. e.
— **Petitlaurent.** 21 Ap. 1874. III, **10**, c. 1, 1, p. 84.
— **Rangod.** 28 F. 1870. 89075*.
— **Tombe et Hemart.** 25 S. 1867. 78258*.
— **Yost, Andrews, Stewart et Hutson.** 2 F. 1870. 88807*.
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— **Barnoud.** 4 Jl. 1867. 76914*.
— **Belfield.** 13 Jl. 1861. II, **80**, c. 1, 1, p. 16.
— **Dupond.** 18 Mr. 1861. II, **82**, c. 1, 1, p. 37.
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— **Marie.** 19 S. 1859. II, **73**, p. 288, pl. 33.
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— **Maurice.** 2 Jl. 1861. II, **80**, c. 1, 1, p. 24.
— **Mennons.** 21 Mr. 1876. III, **18**, i, c. 1, 1, p. 65. 112033. t. e.
— **Merville.** 21 Ap. 1861. II, **80**, c. 1, 1, p. 23.
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— **Noeth.** 14 Mr. 1868. 80031*.
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— **Demmer.** 31 Mr. 1868. 80229*.
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— and envelope. **Clarke.** 8 F. 1868. 79485*.
— and threader **Cailteau.** 21 Je. 1867. 76855*
— — **Mercier.** 20 N. 1867. 78572*.
— and wrapper. **James.** 1 N. 1867. 77981*.
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hook for fixing price-lists, railway tables, etc. **Haunart et Mamelzer.** 17 D. 1872. III, **4**, c. 20, p. 20.
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— **Crosby.** 22 O. 1868. 82907*.
— **Durand.** 10 My. 1869. 85609*.
— **Poole.** 20 F. 1835. I, **55**, p. 470, pl. 41.
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— **Morrall.** 28 D. 1868. 83712*.
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— **Petit.** 28 Ap. 1829. I, **28**, p. 74, pl. 20.
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— **Wells.** 22 D. 1874. III. **10**, c. 16, 1, p. 18.
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— **Montazel.** 20 My. 1858. II, **68**, p. 37, pl. 9.
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— **Roger.** 24 Ag. 1863. II, **86**, c. 20, p. 13.
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in boxes, packing. **Bédé.** 20 O. 1868. 82837*.
in papers, putting. **James.** 7 Ap. 1868. 80370*
— **Sommerville et Cie.** 1 Ag. 1867. 77379*.
packing. **Bennett.** 7 Je. 1862. II, **83**, c. 16, 1, p. 5.
— **Shrimpton.** 26 N. 1868. 83356*.
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thread, and other articles, case for. **Roy et Prevett.** 30 Ja. 1868. 79407*.

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and lace-work machine. **Cartier, Testanière, Ollivier et Guigues.** 10 S. 1864. II, **92**. 64374. t. e.
and veil for ladies. **Remy.** 7 Je. 1865. II, **93**. 67630. t. e.
clipping figured. **Hamel.** 17 Ap. 1868. 80504*.
fabric, calendering. **Villeneuve et Guignol jeune.** 24 Jl. 1865. II, **96**. 68702. t. e.
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fabric ornamenting. **Réal aîné.** 12 S. 1868. 82395*.
fastening comb. **Brandès.** 23 Mr. 1863. II, **90**. 57873. t. e.
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— **Bourdin.** 24 Ag. 1867. 77971*.
— **Broquant.** 21 N. 1866. 73546*.
— **Coevoet, Dawson et Cie.** 24 D. 1869. 88242*.
— **Darnet.** 6 Mr. 1862. II, **84**, c. 6, 3, p. 9.

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— **Guigues.** 15 Jl. 1857. II, **64**, p. 55, pl. 16.
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— **Lepage, Pombla et Seguineau.** 17 N. 1860. II, **78**, p. 127.
— **Longin.** 29 N. 1862. II, **82**, c. 4, 6, p. 4, pl. 1.
— **Payoud.** 12 D. 1862. II, **84**, c. 6, 3, p. 10.
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— **Procopé.** 29 Ja. 1873. III, **8**, i, c. 6, 3, p. 16; **9**, c. 4, 6, p. 1, pl. 4.
— **Rome et Jourdan.** 17 D. 1853. II, **33**, p. 183, pl. 26.
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— **Vincent, Guinqueton et Jauvat.** 9 Jl. 1850. II, **19**, p. 326, pl. 39.
— **Zambaux.** 4 My. 1858. II, **68**, p. 154, pl. 25.
— and other. **Baudoin et Jouannin.** 9 Ag. 1861. II, **80**, c. 4, 6, p. 13, pls. 3, 4, 5, 6, 7.
— circular. **Pillon et l'Hoste.** 12 Je. 1868. 81321*.
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for sardine fishing. **Bélot.** 27 My. 1861. II, **80**, c. 6, 3, p. 2.
— **Erraud.** 24 O. 1874. III, **12**, c. 6, 3, p. 14.
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— **Keenan frères.** 24 F. 1872. III, **3**, c. 16, 3, p. 5.
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— in twist-lace machine. **Burton et Smith.** 3 Ap. 1873. III, **9**, c. 4, 6, p. 5, pl. 3.
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— with cylinder. **Jacquard.** 13 D. 1805. I, **8**, p. 238, pl. 20.
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— — with double grooves for. **Deyrolle.** 12 N. 1875. III, **15**, ii. t. e.
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— **Jones.** 12 Ja. 1865. II, **93.** 65814. t. e.
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— — apparatus. **Blanche.** 1 My. 1867. 76257*.
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— **Perrin et Baudouin.** 26 Ja. 1865. II, **94**. 66040. t. e.
— **Valleau.** 29 Jl. 1869. 86457*.
— for soldiers, travelers, huntsmen, etc. **Mayer.** 15 Jl. 1868. 82823*
— hermetic fastening. **Berrier.** 18 My. 1872. III, **4**, c. 9, 1, p. 14.
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— soldier's. **Perrin.** 24 Ag. 1864. II, **92**. 64266. t. e.
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— — **Chutaux.** 31 D. 1869. 88306*.
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— — **Bouinitsky.** 24 O. 1865. II, **95.** 69141. t. e.
— — **Desnos-Gardissal.** 19 Ag. 1862. II, **82**, c. 3, 1, p. 7, pl. 1.
— — **Desnos-Gardissal.** 31 O. 1862. II, **87**, c. 3, 1, p. 8, pl. 2.
— — **Desnos-Gardissal.** 24 Ja. 1863. II, **87**, c. 3, 1, p. 2, pl. 4.
— — **Desnos-Gardissal.** 13 F. 1864. II, **91.** 61850. t. e.
— — **Dumler.** 27 Mr. 1865. II, **95.** 66773. t. e.
— — **Dumler.** 28 D. 1866. 74289*.
— — **Dumler.** 8 Jl. 1867. 77053*.
— — **Foillard.** 13 Mr. 1869. 84541*.
— — **Giessner.** 2 Ja. 1868. 79044*
— — **Humbert.** 7 Ap. 1863. II, **87**, c. 3, 1, p. 14.
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— — **Langlois.** 3 Jl. 1862. II, **82**, c. 3, 1, p. 7, pl. 3.
— — **Langlois.** 26 Ja. 1866. 70170*.
— — **Lemonnier.** 31 D. 1875. III, **16**, ii, c. 3, 1. 110746. t. e.
— — **Nougaret.** 17 My. 1866. 71631*.
— — **Peignat.** 6 D. 1875. III, **16**, ii, c. 3, 1. 110585. t. e.
— — **Rigolier.** 8 My. 1860. II, **76**, p. 182, pl. 41.
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— — **Watson.** 25 O. 1873. III, **8**, i, c. 3, 1, p. 29, pl. 4.
— — **Zorès.** 21 Ja. 1865. II, **95**, c. 3, 1, p. 1, pl. 1. 65951.
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— — **Newsome.** 22 Ap. 1876. III, **20**, i, c. 3, 1, p. 45. 112537. t. e.
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— and tunneling machine in railways. **Lindsley.** 22 S. 1865. II, **93.** 68816. t. e.
— machine. **Audemar.** 1 S. 1873. III, **6**, c. 8, 1, p. 30.
— rotary engine. **Sievers et Cie.** 6 N. 1867. 78356*

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drill. **Azzolino dell'Acqua.** 20 D. 1872. III, **5**, c. 7, 2, p. 19.
— **Beaumont.** 23 Mr. 1876. III, **21**, ii, c. 7, 2, p. 3, pl. 1. 112018.
— **Besson.** 22 Ja. 1876. III, **18**, i, c. 8, 1, p. 2, pl. 1. 110990.
— **Bourquin.** 28 My. 1863. II, **85**, c. 8, 1, p. 17.
— **Bromton.** 3 O. 1876. III, **21**, ii, c. 7, 2, p. 20. 114817. t. e.
— **Carrié.** 6 My. 1865. II, **85**, c. 8, 1, p. 17.
— **Chagot et Cie.** 12 S. 1874. III, **10**, c. 8, 1, p. 24, pl. 4.
— **Dubois.** 6 Jl. 1876. III, **21**, ii, c. 7, 2, p. 20. 113575. t. e.
— **Faber.** 11 N. 1876. III, **21**, ii, c. 7, 2, p. 20. 115456. t. e.
— **Gay.** 8 Jl. 1863. II, **85**, c. 8, 1, p. 3.
— **Girard.** 5 O. 1865. II, **93**, c. 8, 1, p. 13, pls. 5, 6, 7. 68936.
— **Haupt.** 27 Ap. 1865. II, **93**, c. 8, 1, p. 4, pl. 3. 67151.
— **Jacquet.** 20 Jl. 1863. II, **85**, c. 8, 1, p. 17.
— **Joly.** 23 Jl. 1834. I, **71**, p. 20, pl. 2.
— **Jones.** 29 Ag. 1876. III, **18**, i, c. 8, 1, p. 14, pl. 10. 114332.
— **Leschot.** 19 Jl. 1862. II, **84**, c. 7, 2, p. 7, pl. 3.
— **Lisbey.** 7 Je. 1859. II, **72**, p. 221, pl. 27.
— **Monmont et Séné.** 6 Ap. 1876. III, **18**, i, c. 8, 1, p. 31. 112070. t. e.
— **Penrice.** 26 Je. 1861. II, **80**, c. 3, 1, p. 4, pl. 2.
— **Peslin et Bruniguel.** 30 Jl. 1863. II, **85**, c. 8, 1, p. 1.
— **d'Yochet.** 13 Jl. 1863. II, **85**, c. 8, 1, p. 17.
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— and cutting. **Brydon, Davidson et Harrington.** 12 D. 1872. III, **5**, c. 7, 2, p. 17, pl. 6.
— — machine. **Doering.** 12 O. 1867. 78075*.
— by compressed steam or air. **Castor et Hersent.** 1 Jl. 1869. 86299*.
— machine. **Bartlett.** 28 S. 1854. II, **42**, p. 80, pl. 21.
— — **Blaise, Perreau et Estable frères.** 1 Mr. 1865. II, **93**. 66340. t. e.
— — **Brandt.** 28 D. 1875. III, **17**, c. 7, 2, p. 19, pls. 6, 7. 110839.
— — **Brown.** 25 My. 1870. 90083*.
— — **Brunton.** 6 Jl. 1876. III, **21**, ii, c. 7, 2, p. 7. 113633.
— — **Brydon et Davidson.** 2 D. 1873. III, **6**, c. 8, 1, p. 26, pl. 2.
— — **Burleigh.** 3 D. 1866. 73912*.
— — **Busson.** 2 Mr. 1849. II, **14**, p. 213.
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— — **Doering.** 8 Je. 1866. 71858*.
— — **Doering.** 2 Ap. 1867. 75905*.
— — **Dumas.** 3 D. 1852. II, **29**, p. 18, pl. 4.
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— — **Ellis.** 10 Je. 1875. III, **17**, c. 7, 2, p. 9, pl. 5. 108350.
— — **Fabre.** 3 Ag. 1864. II, **89**. 63930. t. e.
— — **Fahnehjelm.** 3 Ag. 1867. 78334*.
— — **La Compagnie de Mines de Douchey et d'Epinac.** 23 Ja. 1838. I, **81**, p. 290, pl. 26.
— — **Lindsley.** 22 S. 1865. II, **93**. 68816. t. e.
— — **Osterkamp.** 30 S. 1869. 87320*.
— — **Penrice.** 5 My. 1859. II, **72**, p. 215, pl. 26.
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— — **Siprell et de Lisle.** 25 Ja. 1875. III, **17**, c. 7, 2, p. 1, pl. 7. 106552.
— — **de Vismes.** 6 O. 1875. III, **17**, c. 7. 2. 109685. t. e.
— — **Webster.** 21 Je. 1843. I, **59**, p. 213, pl. 20.
— — **Winchester et Phelps.** 9 F. 1875. III, **17**, c. 7, 2, p. 2, pl. 1. 106756.
— — alternate movement. **Darlington.** 30 O. 1873. III, **6**, c. 8, 1, p. 29.
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— — motor. **Société Humboldt.** 18 My. 1872. III, **5**, c. 7, 2, p. 4, pl. 8.
— — steam, air, or water. **Edwards.** 23 Ap. 1873. III, **9**, c. 7, 2, p. 2, pl. 1.
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ore, etc., tool for cutting and piercing. **Bernard.** 2 N. 1865. II, **93**. 69202. t. e.
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cracker, etc., making and filling. **Honoré.** 17 D. 1864. II, **92**, c. 11, 1, p. 24, pl. 1. 65527.
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— **Wells.** 22 S. 1860. II, **77**, p. 243.
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— and steel, for umbrellas and parasols. **Boin fils.** 3 Ap. 1865. II, **93**, c. 16, 2, p. 1, pl. 1. 67520.
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— roller. **Hignette.** 2 F. 1876. III, **18**, i, c. 1, 4, p. 21. 111311. t. e.
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and drawing metals. **Davige.** 23 S. 1872. III, **5**, c. 5, 4, p. 29.
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and reheating large pieces of iron. **Société des forges de Châtillon et Commentry.** 30 Ja. 1861. II, **80**, c. 8, 2, p. 2.
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— **Marland.** 23 S. 1861. II, **80**, c. 8, 4, p. 18.
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— and steel. **Talabot.** 1 F. 1858. II, **66**, p. 362, pl. 50.
— — wheels. **Helson.** 26 S. 1866. 73053*.
— for bolts, etc. **Welton.** 4 Ja. 1859. II, **70**, p. 113.
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— — **Kirk.** 12 F. 1867. 74946.
— — **Lauth.** 30 O. 1876. III, **20**, ii, c. 5, 5, p. 61, pl. 15. 115268.

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— tires, etc. **Chanet, Chauffriat et Joris.** 26 S. 1856. II, **59**, p. 115.
— with levers. **Hollond.** 26 S. 1828. I, **23**, p. 72, pl. 10.
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— **Fleury et Filocque.** 3 S. 1853. II, **85**, c. 8, 2, p. 36.
— **Jolly.** 24 D. 1860. II, **74**, p. 226.
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— and rods, machine for. **Hayden.** 8 Ap. 1874. III, **12**, c. 5, 5, p. 15, pl. 9.
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— **Bouniard.** 21 Jl. 1866. 72211*.
— **Compagnie des hauts fournaux, forges, et aciéries de la marie et des chemins de fer.** 18 N. 1871. III, **2**, c. 5, 2 *bis*, p. 22, pl. 6.
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— **Delpérier.** 27 Mr. 1875. III, **16**, i, c. 5, 5. 102792. t. e.
— **Hahn.** 17 Ag. 1875. III, **16**, i, c. 5, 5, p. 52, pl. 21. 109253.
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— **Lauth et Deby.** 21 S. 1872. III, **5**, c. 5, 5, p. 42.
— **Lebrun-Virloy.** 26 S. 1853. II, **31**, p. 437, pl. 18.
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— **Spencer et MacCorkindale.** 18 Ag. 1866. 72629*.
— **Sublet.** 25 Je. 1874. III, **12**, c. 5, 5, p. 36.
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— and cutter for rails, joists, etc. **Fossoul.** 10 My. 1864. II, **89**. 62829. t. e.
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— applying hydraulics to. **Courtant frères.** 20 D. 1864. II, **91**, c. 5, 5, p. 46, pl. 22. 65557.
— axle. **Dormoy.** 16 Mr. 1863. II, **87**, c. 5, 5, p. 53.
— balance suspension with tongs for. **Maurin.** 23 Ap. 1868. 80276*.
— bored gun. **Chol.** 2 F. 1865. II, **95**, c. 5, 5, p. 2, pl. 18. 65957.
— brick, tile, slab, etc. **Capon-Masoin.** 22 O. 1875. III, **15**, i. t. e.
— carriage. **de La Martellière.** 4 S. 1866. 72806*.
— casting brass apparatus for. **Logo.** 3 Jl. 1867. 76903*.
— car wheels. **Gèze.** 23 Ja. 1864. II, **91**. 61791. t. e.
— cylinder emery-mill for roughing and polishing. **Lauth et Deby.** 4 Jl. 1873. III, **8**, i, c. 5, 5, p. 67.
— differential. **Compagnie des forges de Châtillon et Commentry.** 2 Mr. 1864. II, **89**, c. 8, 2, p. 5, pl. 6. 62132.
— edge tools. **Racadon.** 17 N. 1865. II, **93**. 69292. t. e.
— file. **Monsoy.** 31 Mr. 1863. II, **87**, c. 5, 5, p. 54.
— flat or square bars. **Boigues, Rambourg et Pinson.** 4 D. 1862. II, **84**, c. 8, 2, p. 28.
— forging car wheels. **Gibert.** 6 My. 1864. II, **89**, c. 8, 2, p. 14. 62945.
— friction clutch. **Chalas.** 29 Ap. 1868. 80692*.
— frying-pan handle. **Thomas.** 6 N. 1857. II, **64**, p 372.
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— gold and silver wire. **Frangin.** 13 Je. 1872. III, **3**, c. 8, 3, p. 22.
— groove. **Sibut aîné.** 8 Mr. 1870. 88927*.
— hydraulic contrivance for working. **Revollier et Biétrix.** 14 Ja. 1875. III, **14**, i, c. 8, 2, p. 19, pl. 4. 106259.
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— — **Roy.** 16 D. 1868. 83599*.
— — **Trotin.** 12 F. 1839. I, **84**, p. 512.
— — **Vigour.** 7 F. 1870. 88511*.

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— — and steel. **Dauzat.** 13 S. 1867. 77707*.
— — — **Lasson.** 15 Je. 1875. III, **16**, i, c. 5, 5. 108430. t. e.
— — — **Lauth.** 9 F. 1874. III, **10**, c. 8, 2, p. 14, pl. 6.
— — — **Talabot.** 6 F. 1858. II, **65**, p. 349.
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— — **Leseur.** 24 N. 1876. III, **18**, i, c. 8, 3, p. 23, pl. 1. 115694.
— — **Sagnier.** 16 Je. 1866. 71974*.
— — **Société des fonderies et forges de l'Horme.** 29 Mr. 1876. III, **20**, ii, c. 5, 5, p. 20, pl. 7. 112012.
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— — **Petit-Drumaux.** 14 Ag. 1865. II, **93**. 68313. t. e.
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— **Barbat.** 18 N. 1865. II, **96**. 69402. t. e.
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— **Zienkowicz.** 18 Ag. 1876. III, **21**, ii, c. 7, 3, p. 16, pl. 3. 114219.
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— **Aubineau et Bouriquet.** 15 Mr. 1865. II, **95**, c. 5, 7, p. 14, pl. 4. 66592.
— **Avery.** 4 Ja. 1853. II, **30**, p. 111, pl. 18.
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— **Baer, Rempel et Pin.** 19 O. 1867. 78198*
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— **Bariquand.** 29 Jl. 1871. III, **2**, c. 5, 2 *ter*, p. 11, pl. 1.
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— **Barèrre et Caussade.** 28 F. 1857. II, **60**, p. 188.
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— **Bartleet.** 12 N. 1853. II, **31**, p. 162.
— **Bartlett.** 26 My. 1866. 71730*.
— **Bartram.** 28 O. 1865. II, **95**, c. 5, 7, p. 34, pl. 8. 69171.
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— **Bassermann et Mondt.** 9 Ja. 1871. III, **2**, c. 5, 2 *ter*, p. 1, pl. 2.
— **Beaufils.** 26 My. 1863. II, **87**, c. 5, 7, p. 24.
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— **Becker.** 30 N. 1874. III, **12**, c. 5, 7, p. 25.
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— **Bernier.** 12 D. 1865. II, **95**. 69675. t. e.
— **Berthelot.** 11 Ja. 1850. II, **18**, p. 77, pl, 11.
— **Berthier.** 17 N. 1871. III, **2**, c. 5, 2 *ter*, p. 27, pl. 5.
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— **Bishop.** 25 Jl. 1860. II, **76**, p. 239.
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— **Bishop.** 19 Je. 1875. III, **16**, i, c. 5, 7. 108480. t. e.
— **Bland.** 1 Ap. 1863. II, **87**, c. 5, 7, p. 5, pl. 3.
— **Bland.** 25 F. 1875. III, **16**, i, c. 5, 7, p. 11, pls. 6, 7. 106926.
— **Bletcher.** 13 Ja. 1868. 79150*.
— **Blomfield.** 22 Je. 1872. III, **5**, c. 5, 7, p. 23, pl. 2.
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— **Bollman.** 27 N. 1856. II, **60**, p. 9, pl. 3.
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— **Bonnaud.** 7 Jl. 1862. II, **82**. c. 5, 7, p. 20.
— **Bonnaz.** 10 Je. 1873. III, **12**, c. 5, 7, p. 2, pl. 9.
— **Bonvallet.** 16 S. 1861. II, **80**, c. 5, 2, p. 71.
— **Boudin.** 19 N. 1853. II, **31**, p. 161.
— **Bougouin.** 19 Ja. 1874. III, **20**, ii, c. 5, 7, p. 1, pl. 10. 101887.
— **Bourgoin.** 19 Ja. 1874. III, **12**, c. 5, 7, p. 5, pl. 6.
— **Boyd.** 23 O. 1862. II, **82**, c. 5, 7, p. 18, pl. 6.
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— **Cornely.** 2 Jl. 1867. 76982*.
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— **Thompson.** 5 O. 1875. III, **16**, i, c. 5, 7. 109874. t. e.
— **Tyler.** 23 Mr. 1867. 75697*.
— **Veillet.** 6 O. 1868. 73158*.
— **Vendraud.** 10 Ag. 1870. 90832*.
— **Villamil.** 30 Ja. 1856. II, **54**, p. 289, pl. 36.
— **Villamil.** 30 Ag. 1856. II, **58**, p. 295, pl. 42.
— **Villard.** 5 O. 1863. II, **85**, c. 1, 1, p. 23.
— **Vilira de Castro.** 5 My. 1876. III, **20**, ii, c. 5, 7, p. 5, pl. 10. 112739.
— **Vosper.** 30 O. 1874. III, **12**, c. 5, 7, p. 26.
— **Vuibert.** 21 O. 1872. III, **12**, c. 5, 7, p. 1, pl. 1.
— **Vyse.** 8 Ag. 1870. 90833*
— **Wackernie.** 25 Ap. 1866. 71384*

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— **Wanostrocht.** 12 My. 1869. 85667*.
— **Wanzer.** 18 N. 1863. II, **87**, c. 5, 7, p. 24.
— **Warchalowski.** 27 S. 1869. 87294*.
— **Wardwell.** 6 Ja. 1876. III, **20**, ii, c. 5, 7, p. 52. 110988. t. e.
— **Warth et Faber.** 31 Ag. 1869. 87031*.
— **Webb.** 17 Jl. 1868. 81767*.
— **Webb.** 8 Ag. 1874. III, **12**, c. 5, 7, p. 25.
— **Weir.** 7 F. 1874. III, **12**, c. 5, 7, p. 6, pl. 7.
— **Westmoreland.** 10 Je. 1861. II, **80**, c. 5, 2, p. 69.
— **Whitaker.** 23 Ap. 1856. II, **56**, p. 412, pl. 33.
— **Whitehill.** 2 N. 1872. III, **5**, c. 5, 7, p. 28, pl. 9.
— **Wilcox.** 24 My. 1862. II, **82**, c. 5, 7, p. 12, pl. 5.
— **Wilcox.** 26 Ja. 1864. II, **91**, c. 5, 7, p. 3, pl. 2. 61685.
— **Willcox et Carleton.** 10 Ag. 1871. III, **2**, c. 5, 2 *ter*, p. 12, pls. 4, 5.
— **Wilkins.** 11 Jl. 1862. II, **82**, c. 5, 7, p. 15, pl. 3.
— **Williams.** 16 My. 1862. II, **82**, c. 5, 7, p. 20.
— **Wilson.** 2 Je. 1853. II, **31**, p. 258, pl. 27.
— **Wilson** 25 Ag. 1866. 72725*
— **Wilson.** 18 O. 1866. 73374*
— **Wilson.** 5 Ap. 1872. III, **5**, c. 5, 7, p. 37.
— **Wilson.** 23 D. 1872. III, **5**, c. 5, 7, p. 35, pl. 11.
— **Winter.** 11 S. 1868. 82404*.
— **Wolff.** 18 F. 1865. II, **95**. 66304. t. e.
— **Woodruff.** 23 Jl. 1866. 72370*.
— **Woodruff.** 26 Ja. 1867. 74712*.
— **Woodruff.** 2 Ag. 1872. III, **5**, c. 5, 7, p. 24, pl. 3
— **Wormald et Hall.** 3 F. 1872. III, **5**, c. 5, 7, p. 2, pl. 6.
— **Zanni.** 15 S. 1865. II, **95**. 68764. t. e.
— **Zulzer.** 18 Ap. 1856. II, **55**, p. 318, pl. 40.
— and bobbin-winder. **Willis et Rice.** 22 F. 1866. 70511*.
— and measurer. **Woodruff.** 25 Ag. 1865. II, **95**. 68444. t. e.
— and needle. **Turner.** 8 S. 1875. III, **16**, i, c. 5, 7, p. 23, pl. 5. 109532.
— — **Weir.** 27 Mr. 1872. III, **5**, c. 5, 7, p. 9, pl. 9.
— and regulator. **Zuckerman.** 6 Jl. 1865. II, **95**, c. 5, 7, p. 30, pl. 8. 68045.
— attachment. **MacGrah et Turner.** 25 Mr. 1876. III, **20**, ii, c. 5, 7, p. 52. 112030. t. e.
— bag. **Garland et Gove.** 14 Jl. 1875. III, **16**, i, c. 5, 7. 108824. t. e.
— — and carpet. **Hall.** 11 My. 1876. III, **20**, ii, c. 5, 7, p. 52. 112889. t. e.
— — — **Webster.** 22 F. 1876. III, **20**, ii, c. 5, 7, p. 52. 111617. t. e.
— binder. **Woodruff.** 21 Ag. 1865. II, **95**. 68444. t. e.
— binding guide. **Boyer.** 4 Je. 1862. II, **82**, c. 5, 7, p. 20.
— — **Labourbe.** 28 Ag. 1869. 86788*.
— — **Matisse.** 23 Ap. 1875. III, **16**, i, c. 5, 7. 107773. t. e.
— — **Rolland.** 27 My. 1865. II, **95**. 67476. t. e.
— bobbin. **Klotz.** 22 D. 1863. II, **87**, c. 5, 7, p. 24.
— — **Klotz.** 18 F. 1874. III, **12**, c. 5, 7, p. 25.
— — **Seeling.** 28 N. 1872. III, **5**, c. 5, 7, p. 38.
— — holder. **Jacquemet.** 21 Mr. 1876. III, **20**, ii, c. 5, 7, p. 52. 112000. t. e.
— — winder. **Bariquand.** 6 O. 1876. III, **20**, ii, c. 5, 7, p 33, pl. 4. 114883.
— — — **Klotz.** 31 O. 1865. II, **95**, c. 5, 7, p. 36. 69188.
— — — **Powers.** 7 Ag. 1876. III, **20**, ii, c. 5, 7, p. 30, pl. 1. 114081.
— book. **Shedd.** 10 O. 1872. III, **5**, c. 5, 7, p. 25, pl. 11.
— boot and shoe. **Baldwin.** 2 Mr. 1872. III, **5**, c. 5, 9, p. 6, pl. 1.
— — **Blake.** 16 My. 1861. II, **80**, c. 5, 2, p. 65, pls. 25, 26.
— — **Blake.** 28 F. 1873. III, **8**, i, c. 5, 9, p. 6, pl. 2.
— — **de Bue.** 23 F. 1876. III, **20**, ii, c. 5, 9, p. 23. 111625. t. e.
— — **Curtis.** 5 Jl. 1873. III, **8**, i, c. 5, 9, p. 9, pl. 2.
— — **Gardner.** 1 Ap. 1876. III, **20**, ii, c. 5, 9, p. 6, pl. 1. 112190.
— — **Gardner.** 12 My. 1876. III, **20**, ii, c. 5, 9, p. 10, pl. 3. 112887.
— — **Goodyear.** 15 Ap. 1872. III, **5**, c. 5, 9, p. 17, pl. 8.
— — **Goodyear.** 24 My. 1876. III, **20**, ii, c. 5, 9, p. 13, pl. 4. 113046.
— — **Lippert.** 31 Ja. 1874. III, **12**, c. 5, 9, p. 1, pl. 3.
— — **Mills.** 26 Ap. 1872. III, **5**, c. 5, 9, p. 21, pls. 5, 6.
— — sole. **Blake.** 5 My. 1859. II, **71**, p. 246.

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— bottle cover. **Lamouroux.** 28 Je. 1870. 90323*.
— — **de Sainte-Marie.** 24 Je. 1875. III, **16**, i, c. 5, 5, p. 44, pl. 16. 108537.
— — with chain-stitch. **Bonnaud frères.** 12 F. 1875. III, **15**, ii, c. 20, p. 4.
— braiding and gathering apparatus. **Thompson.** 17 Je. 1874. III, **12**, c. 5, 7, p. 25.
— brake. **Hurtu et Hautin.** 3 Ag. 1876. III, **20**, ii, c. 5, 7, p. 29, pl. 9. 114035.
— — **Minor et Bowmann.** 15 Mr. 1867. 75502*.
— broom. **Perrin.** 2 Mr. 1864. II, **91**, c. 5, 7, p. 4. 62145
— button-hole. **Abonneau.** 26 F. 1876. III, **20**, ii, c. 5, 7, p. 52. 111651. t. e.
— — **Clements.** 1 F. 1870. 88752*.
— — **Cornely.** 3 Ap. 1867. 75904*.
— — **Cornely.** 27 Jl. 1875. III, **16**, i, c. 5, 7, p. 22, pl. 13. 108983.
— — **Derocquigny et Gance.** 18 F. 1865. II, **95**. 66281. t. e.
— — **Grimme et Nasch.** 25 Ap. 1870. 89743*.
— — **Helwig.** 5 Ag. 1869. 86699*.
— — **Howard et Jackson.** 5 Je. 1871. III, **2**, c. 5, 2 *ter*, p. 7, pl. 6.
— — **Kallmeyer.** 10 Ap. 1873. III, **8**, i, c. 5, 7, p. 11, pl. 1.
— — **Keith.** 25 S. 1872. III, **5**, c. 5, 9, p. 36.
— — **Melhuish.** 10 F. 1876. III, **20**, ii, c. 5, 7, p. 5, pl. 8. 111443.
— — **Nasch.** 5 O. 1869. 86996*.
— — **Schmidt et Kallmeyer.** 30 Jl. 1875. III, **16**, i, c. 5, 7, p. 22, pl. 8. 109066.
— — **Wilson et Rowlett.** 30 Jl. 1861. II **80**, c. 5, 2, p. 53.
— — **Wood.** 26 Mr. 1872. III, **5**, c. 5, 7, p. 11, pl. 10.
— — **Woodruff.** 19 Mr. 1867. 75004*.
— cable. **Leclerc-Laroche.** 26 N. 1857. II, **64**, p. 354.
— canvas. **Barton.** 24 F. 1873. III, **8**, i, c. 5, 7, p. 1.
— — **Coignard.** 12 Je. 1867. 76638*.
— card-shuttle. **Chamblant.** 21 N. 1871. III, **2**, c. 5, 2 *ter*, p. 23.
— carpet-bag. **Garland, Gove et Friedlander.** 3 S. 1874. III, **12**, c. 5, 7, p. 14, pl. 19.
— — and valise. **Russ et Gandell.** 3 Ap. 1866. 71093*.
— carriage. **de Laney-Stoops.** 19 F. 1866. 70467*.
— chain-stitch. **Thimonnier.** 21 Jl. 1845. II, **5**, p. 168, pl. 28.
— circular. **Bonbon et Jannet.** 26 Ja. 1869. 83771*.
— clamp. **Alminana et Sarkissian.** 27 S. 1876. III, **20**, ii, c. 5, 7, p. 52. 114716. t. e.
— cloth press. **Grimes.** 23 Jl. 1870. 90750*.
— converting embroidering into braiding. **Veillet.** 14 Mr. 1876. III, **20**, ii, c. 5, 7, p. 7, pl. 10. 111782.
— corder. **Baudoin.** 9 F. 1863. II, **87**, c. 5, 7, p. 24.
— counter-balance. **Gache et Rigod.** 31 My. 1870. 90158*.
— covering, guide-box, and table. **Maquaire.** 13 Ja. 1873. III, **8**, i, c. 5, 7, p. 1.
— crank, articulated. **Givry et Sevenet.** 17 N. 1860. II, **78**, p. 118.
— crinoline guide to. **Milliac.** 19 Mr. 1866. 71016*.
— cutting out, goffering leather, etc., by. **Searle.** 1 S. 1875. III, **16**, i, c. 5, 7, p. 23. 109435.
— cylindrical. **Brossard.** 26 F. 1867. 74871*.
— deadening noise in. **Fierfort.** 21 O. 1869. 87536*.
— disengaging gear. **Cornely.** 29 F. 1876. III, **20**, ii, c. 5, 7, p. 7, pl. 8. 111725.
— double loop stitch. **Quinquarlet.** 27 Mr. 1875. III, **17**, c. 4, 5, p. 10, pl. 6. 109015.
— double stitch. **Coignard.** 27 O. 1875. III, **16**, i, c. 5, 7, p. 36, pls. 11, 12. 110074.
— — **Legat.** 20 Ja. 1875. III, **16**, i, c. 5, 7, p. 4, pl. 15. 106513.
— — **Quinquarlet-Deschamps.** 19 Je. 1875. III, **17**, c. 4, 5, p. 14, pl. 6. 108366
— edging apparatus. **Duplessis.** 22 Ag. 1862. II, **82**, c. 5, 7, p. 17, pl. 1.
— embroidering apparatus. **Hotchkiss.** 4 O. 1872. III, **5**, c. 5, 7, p. 25.
— — **Klotz.** 18 D. 1860. II, **79**, p. 154, pl. 22.
— — **Moëne.** 12 Jl. 1873. III, **8**, i, c. 5, 7, p. 20.
— — **Rolland.** 24 Ap. 1872. III, **5**, c. 5, 7, p. 37.
— — **Rose.** 23 D. 1876. III, **20**, ii, c. 5, 7, p. 48, pl. 10. 116162.

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— feeder. **Delorme.** 10 D. 1872. III, **5**, c. 5, 7, p. 33.
— — **Legrady.** 27 Mr. 1876. III, **20**, ii, c. 5, 7, p. 52. 112096. t. e.
— — **Loubinoux.** 19 Ag. 1876. III, **20**, ii, c. 5, 7, p. 31, pl. 8. 114239.
— — **Muir.** 20 Ap. 1872. III, **5**, c. 5, 7, p. 16, pl. 1.
— — **Smyth.** 29 N. 1871. III, **2**, c. 5, 2 *ter*, p. 24, pl. 3.
— — **Smyth.** 28 My. 1873. III, **8**, i, c. 5, 7, p. 16, pl. 6.
— — **Smyth.** 12 My. 1874. III, **12**, c. 5, 7, p. 12, pl. 5.
— feeding. **Chemin.** 6 Mr. 1865. II, **95**, c. 5, 7, p. 6, pl. 8. 66478.
— folding device. **Cellier.** 28 S. 1876. III, **20**, ii, c. 5, 7, p. 52. 114722. t. e.
— for applying lace borders on veils, etc., catch in. **Caron.** 16 Mr. 1865. II, **95**. 66598. t. e.
— for beads. **Salomons.** 1 D. 1874. III, **12**, c. 5, 7, p. 26.
— for cutting and sewing oval pieces. **Judson.** 25 Ap. 1872. III, **5**, c. 5, 7, p. 19.
— for open-worked seam stitches. **Delame et Lelièvre.** 19 N. 1872. III, **12**, c. 5, 7, p. 21, pl. 2.
— for two parallel seams. **Leconte et fils.** 21 Ag. 1866. 73175*.
— frame. **Froger et Escande.** 10 S. 1875. III, **16**, i, c. 5, 7, p. 24. 109555.
— glove. **Bergmann et Hüttemeier.** 2 Ap. 1872. III, **6**, c. 5, 7, p. 12, pl. 8.
— — **Chosson.** 18 Jl. 1865. III, **95**, c. 5, 7, p. 31. 68081.
— — **Dufort et Gance.** 1 F. 1868. 79422*.
— — **Gance et Derocquigny.** 12 Je. 1866. 71890*.
— — **de Gobat.** 19 N. 1866. 73722*.
— — **Gray.** 20 S. 1875. III, **16**, i, c. 5, 7, p. 25, pl. 11. 109644.
— — **Gros.** 22 O. 1862. II, **83**, c. 16, 1, p. 12.
— — **Gulbrandsen et Rettinger.** 9 D. 1875. III, **16**, i, c. 5, 7, p. 36, pl. 13. 110637.
— — **Hock et Cie.** 6 My. 1876. III, **20**, ii, c. 5, 7, p. 14, pl. 7. 112723.
— — **Hock et Cie.** 30 O. 1876. III, **20**, ii, c. 5, 7, p. 34, pl. 1. 115264.
— — **Jacquemet.** 5 N. 1869. 87541*.
— — **Kluz et Schultheiss.** 7 Je. 1876. III, **20**, ii, c. 5, 7, p. 27, pl. 10. 113219.
— — **de Mailly.** 13 D. 1872. III, **5**, c. 5, 7, p. 33, pl. 2.
— — **Noerholm.** 28 Mr. 1872. III, **5**, c. 5, 7, p. 13, pl. 8.
— — **Perrare-Michal.** 22 O. 1875. III, **16**, i, c. 5, 7; **20**, c. 5, 7, p. 1. pl. 1. 110023.
— — **Peugeot.** 26 Ap. 1875. III, **16**, i, c. 5, 7 p. 19, pl. 3. 107381.
— — **Poivret.** 1 O. 1859. II, **72**, p. 411.
— — **Rudolph et Haberkorn.** 26 Ap. 1869. 86252*.
— — **Schrubb.** 23 F. 1872. III, **5**, c. 5, 7, p. 4, pl. 10.
— — **Sornin.** 3 N. 1871. III, **2**, c. 5, 2 *ter*, p. 22, pl. 4.
— — **Strock.** 4 O. 1876. III, **20**, ii, c. 5, 7, p. 33, pl. 10. 114778.
— — **Vuibert.** 12 F. 1870. 88931*.
— guide. **Goodwin.** 23 N. 1864. II, **91**, c. 5, 7, p. 12, pl. 4. 65248.
— — **Leblanc.** 26 F. 1867. 75207*.
— — for whip stitches, button holes, etc. **Gritzner.** 3 S. 1867. 77683*.
— — hair-cloth. **Milliac.** 19 Mr. 1866. 71016*.
— hat. **de Clermont et Cie.** 14 My. 1872. III, **5**, c. 5, 7, p. 19.
— — **Legat.** 26 F. 1870. 89068*.
— hemmer. **Jacquemet.** 9 F. 1874. III, **12**, c. 6, 7, p. 25.
— — **Morin.** 7 Ja. 1875. III, **16**, i, c. 5, 7, p. 3, pl. 2. 106261.
— hemming feeder. **Quinquarlet-Dupont.** 5 Mr. 1868. 79700*.
— hemming guide. **André et Fontaine.** 24 Mr. 1868. 80097*.
— — **Chammartin et Boissier.** 18 Ja. 1869. 83844*.
— hook lifter. **Aubineau et Bouriquet.** 13 N. 1867. 78459*.
— hosiery. **Guivret et Cie.** 15 O. 1874. III, **13**, c. 4, 5, p. 27, pl. 7.
— — **Guivret et Cie.** 27 Mr. 1875. III, **17**, c. 4, 5, p. 11, pl. 5. 107439.
— leather. **Gough et Ginks.** 2 My. 1874. III, **12**, c. 5, 7, p. 25.
— — glove. **Rudolph.** 8 S. 1868. 82331*.

SEWING machine—continued.
— machine to manufacture cotton cases for. **Neveux.** 29 Mr. 1867. 75823*.
— mechanism. **Willcox.** 8 Mr. 1870. 89177*.
— moderating motor. **Febvre, Pouget et Bonniot.** 6 N. 1875. III, **16**, i, c. 6, 7. 110142. t. e.
— motor. **Challier.** 12 F. 1870. 89161*.
— — **Smyth.** 23 S. 1873. III, **8**, i, c. 5, 7, p. 23.
— — for catch under. **Brossard.** 9 Ap. 1867. 75642*.
— motor. **Allemand.** 4 Ja. 1869. 83841*.
— — **Ashforth et Hardy.** 21 Ap. 1870. 89703*.
— — **Brillaud.** 23 S. 1867. 77912*.
— — **Dubois-Gillet.** 14 D. 1867. 78852*.
— — **Dubos.** 28 Ja. 1869. 84180*.
— — **Fontaine.** 2 D. 1869. 88052*.
— — **Garcin.** 24 Mr. 1868. 79968.
— — **Lambert, Pontremoli et Noblet.** 27 Mr. 1869. 85972*.
— — **Lazard frères.** 22 Mr. 1869. 84925*.
— — **Lowden.** 8 Jl. 1872. III, **5**, c. 5, 7, p. 38.
— — **Nicaise.** 21 F. 1866. 70468*.
— — **Proctor.** 17 S. 1874. III, **11**, ii, c. 12, 1, p. 10, pl. 6.
— — **Shiver.** 16 S. 1874. III, **11**, ii, c. 12, 1, p. 11, pl. 6.
— — electric. **Dervieu.** 1 D. 1869. 88056*.
— — — **Stevens et Hendy.** 31 My. 1870. 90207*.
— — steam. **Fontaine.** 11 Je. 1869. 86000*.
— movable mountings on casters for. **Sargent.** 30 Jl. 1873. III, **8**, i, c. 5, 7, p. 22.
— multiple. **Larau et Levillayer.** 8 O. 1866. 73204*.
— musical. **Seeling.** 20 Je. 1872. III, **5**, c. 5, 7, p. 38.
— needle. **Civrais et Hamelin.** 7 My. 1862. II, **82**, c. 5, 7, p. 12.
— — **Heath.** 19 Jl. 1875. III, **16**, i, c. 5, 7, p. 21.
— — **Newbill.** 5 N. 1869. 87749*.
— — **Romeu.** 25 Ag. 1864. II, **91**. 64268. t. e.
— — **Suplee.** 27 O. 1869. 87618*.
— — and needle-carrier. **Lloyd.** 1 F. 1870. 88766*.
— — and needle-holder. **Carpenter.** 22 Ja. 1870. 88652*.
— — and shuttle. **Bujeaud.** 17 Mr. 1868. 79799*.
— — and stretcher. **Bonbon.** 21 O. 1868. 82961*.
— — for crochet or chain stitch. **Goodwin.** 21 N. 1863. II, **87**, c. 5, 7, p. 21, pl. 5.
— — for quilting and embroidering. **Bailly.** 17 S. 1863. II, **87**, c. 5, 7, p. 12.
— — guide. **André et Fontaine.** 24 Mr. 1869. 84944*.
— — making. **Leroux.** 14 Jl. 1858. II, **68**, p. 216.
— — setter and threader. **Norcombe.** 18 Mr. 1876. III, **20**, ii, c. 5, 7, p. 52. 111971. t. e.
— — threader. **Gaspary.** 24 My. 1872. III, **5**, c. 5, 7, p. 38.
— — — **Lanoelle.** 10 Je. 1869. 86009*.
— noiseless shuttle-carriage for. **Megret.** 1 Mr. 1867. 75274*.
— pawl drag motion. **Gilles, Servat et Cie.** 31 Ja. 1870. 88762*.
— pitch thread. **Ashe.** 26 S. 1872. III, **5**, c. 5, 9, p. 34, pls. 8, 9.
— plait-guide. **Fuller et Barnum.** 14 D. 1868. 84372*.
— plaiter. **Bouillon.** 25 Jl. 1873. III, **8**, i, c. 5, 7, p. 33.
— — **Pollack.** 11 Ja. 1872. III, **5**, c. 5, 7, p. 1, pl. 11.
— — and gatherer. **Watkins.** 12 F. 1872. III, **5**, c. 5, 7, p. 3, pl. 1.
— reduction apparatus. **Bascans.** 27 Jl. 1868. 81831*.
— reel for binding hats and caps. **Berne.** 26 Mr. 1862. II, **82**, c. 5, 7, p. 20.
— regulator. **Buxtorf.** 13 Je. 1876. III, **21**, i, c. 4, 5, p. 16, pl. 3. 113306.
— — **Kips, Bataille et Bloom.** 22 D. 1874. III, **12**, c. 5, 7, p. 26.
— rest for thread balls. **Klotz.** 1 D. 1873. III, **8**, i, c. 5, 7, p. 26.
— revolving table. **Lejeune et Vallas.** 26 Ja. 1860. II, **74**, p. 228.
— sail. **Coignard.** 12 Je. 1867. 76638*.
— sanitary seat. **Prévost et Escande.** 30 S. 1875. III, **15**, i. t. e.
— self-acting electric. **Cazal.** 17 Ag. 1868. 82050*
— shoe. **Cerisier.** 8 N. 1865. II, **95**. 69236. t. e.
— — **Gardner.** 9 Jl. 1872. III, **5**, c. 5, 9, p. 25, pls. 2, 3.
— — **Goodwin.** 8 F. 1873. III, **8**, i, c. 5, 9, p. 5, pl. 1.
— — **Lippert.** 31 Ja. 1874. III, **12**, c. 5, 9, p. 1, pl. 3.

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— — **Mennons.** 23 Mr. 1865. II, **95**, c. 5, 9, p. 3, pl. 3. 66710.
— — and harness. **Sollier et Bedel.** 17 S. 1863. II, **87**, c. 5, 9, p. 4.
— shuttle. **André.** 1 S. 1871. III, **2**, c. 5, 2 *ter*, p. 20.
— — **Bariquand.** 2 D. 1876. III, **20**, ii, c. 5, 7, p. 47, pl. 4. 115810.
— — **Brown.** 23 D. 1876. III, **20**, ii, c. 5, 7, p. 52. 116143. t. e.
— — **Dodge.** 5 D. 1872. III, **5**, c. 5, 7, p. 3.
— — **Fery et Sallot.** 25 F. 1867. 75170*.
— — **Graeler et Oudin.** 19 S. 1857. II, **65**, p. 99, pl. 20.
— — **Hedouin.** 26 My. 1860. II, **77**, p. 155, pl. 22.
— — **Hurtu et Hautin.** 14 N. 1871. III, **2**, c. 5, 2 *ter*, p. 23, pl. 1.
— — **Jurion.** 18 S. 1868. 82457*.
— — **Kappmeyer.** 11 My. 1874. III, **12**, c. 5, 7, p. 11, pl. 3.
— — **Klotz.** 22 Ag. 1867. 77598*.
— — **Lecluse.** 18 My. 1858. II, **68**, p. 75, pl. 17.
— — **Ludw et Lœwe.** 1 F. 1872. III, **5**. c. 5, 7, p. 37.
— — **Madray.** 17 Je. 1867. 76810*.
— — **Marloteau.** 29 N. 1869. 88027*.
— — **Pitoiset.** 7 Jl. 1860. II, **77**, p. 292.
— — **Pollack.** 21 N. 1876. III, **20**, ii, c. 5, 7, p. 52. 115642. t. e.
— — **Rignault.** 8 O. 1869. 87386*.
— — **Strock.** 23 My. 1866. 71671*.
— — **Thabourin et Klein.** 7 S. 1871. III, **2**, c. 5, 2 *ter*, p. 19, pl. 3.
— — and reel. **Graeter.** 15 O. 1864. II, **91**. 64773. t. e.
— — bobbin unwinder. **Sternaux.** 16 S. 1867. 77725*
— — rotary tension for. **Berger et Garnier.** 17 Mr. 1870. 89244*.
— — saddlery. **Hurtu et Hautin.** 11 My. 1867. 76710*.
— — transparent. **Lejeune.** 4 D. 1865. II, **95**. 69591. t. e.
— spring. **Viale.** 28 Ag. 1874. III, **12**, c. 5, 7, p. 25.
— — motor. **Deray.** 5 N. 1866. 73519*.
— — — **Lopez.** 23 N. 1875. III, **16**, i, c. 5, 7. 110445. t. e.
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— — — **Prou et Seguineau.** 13 O. 1875. III, **16**, i, c. 5, 7. 109923. t. e.
— steam. **Morin.** 25 Ap. 1868. 80278*.
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— — and rush. **Pouchaud.** 12 Je. 1867. 76655*.
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— — hat, etc. **Willms.** 3 Ja. 1865. II, **95**. 66401. t. e.
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— **Barrozzi.** 8 D. 1875. III, **14**, ii. 110594. t. e.
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— **Cattlin.** 25 Mr. 1875. III, **14**, ii, c. 16, 4, p. 8. 107720.
— **Chatel et Gaultier.** 8 Mr. 1876. III, **18**, i, c. 16, 4, p. 15. 111822. t. e.
— **Clark.** 28 S. 1876. III, **18**, i, c. 16, 4, p. 18. 114757. te.
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— **Cornu.** 17 Jl. 1876. III, **18**, i, c. 16, 4, p. 17. 113799. te.
— **Duddell.** 30 Mr. 1876. III, **18**, i, c. 16, 4, p. 7. 112162.
— **Durand et Admet.** 9 Je. 1876. III, **18**, i, c. 16, 4, p. 16. 113241. t. e.
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— **Garcin.** 26 Jl. 1818. I, **23**, p. 68, pl. 9.
— **Goodwin.** 3 F. 1876. III, **18**, i, c. 16, 4, p. 2, pl. 1. 111330.
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— **Greathead.** 18 Mr. 1876. III, **18**, i, c. 16, 4, p. 6, pl. 3. 111963.
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— **Guillaume.** 23 F. 1876. III, **18**, i, c. 16, 4, p. 15. 111596. t. e.
— **Harrington.** 2 D. 1875. III, **14**, ii. 110541. t. e.
— **Hoevel.** 9 Ag. 1876. III, **18**, i, c. 16, 4, p. 11, pl. 3. 114107.
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— **Keel.** 5 F. 1876. III, **18**, i, c. 16, 4, p. 14. 111370. t. e.
— **Kunstaedter.** 3 Jl. 1876. III, **18**, i, c. 16, 4, p. 17. 113623. t. e.
— **Lamb.** 19 Je. 1876. III, **18**, i, c. 16, 4, p. 16. 113388. te.
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— **Mac-Lintock et Ragg.** 25 Ag. 1876. III, **18**, i, c. 16, 4, p. 12, pl. 4. 114305.
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— **Plimpton.** 30 Ja. 1875. III, **14**, ii, c. 16, 4, p. 4, pl. 2. 106652.
— **Pricaz et Bodin.** 28 Jl. 1876. III, **18**, i, c. 16, 4, p. 17. 113983. t. e.
— **Rebour.** 3 Jl. 1876. III, **18**, i, c. 16, 4, p. 17. 113589. t. e.
— **Robinson.** 26 F. 1876. III, **18**, i, c. 16, 4, p. 15. 111678. t. e.
— **Rooke.** 18 My. 1876. III, **18**, i, c. 16, 4, p. 16. 112928. t. e.
— **Skidmore.** 24 Ja. 1876. III, **18**, i, c. 16, 4, p. 14. 111213. t. e.
— **Spiller.** 22 Ja. 1875. III, **14**, ii, c. 16, 4, p. 2, pl. 2. 106553.
— **Stratigos.** 16 D. 1876. III, **18**, i, c. 16, 4, p. 19. 116035. t. e.
— **Taaffe.** 16 Ap. 1875. III, **14**, ii, c. 16, 4, p. 8, pl. 1. 107679.
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— **Thomas.** 24 My. 1876. III, **18**, i, c. 16, 4, p. 16. 113063. t. e.
— **Todd.** 26 My. 1876. III, **18**, i, c. 16, 4, p. 16. 113065. t. e.
— **Vacher.** 15 Jl. 1876. III, **18**, i, c. 16, 4, p. 17. 113726. t. e.
— **Walcker.** 13 Ap. 1876. III, **18**, i, c. 16, 4, p. 7. 112442.
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— **Wekey.** 25 Jl. 1876. III, **18**, i, c. 16, 4, p. 11, pl. 2. 113921.
— **Westlara.** 9 S. 1875. III, **18**, i, c. 16, 4, p. 1, pl. 1. 109534.
— **Weyher.** 1 Mr. 1876. III, **18**, i, c. 16, 4, p. 15. 111749. t. e.
— **White et Raphael.** 24 My. 1876. III, **18**, i, c. 16, 4, p. 16. 113069. t. e.
— **Whitlow.** 26 Ag. 1876. III, **18**, i, c. 16, 4, p. 17. 114351. t. e.
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— **Topham.** 4 My. 1876. III, **19**, ii, c. 20, p. 34. 112704. t. e.
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— **Bujac.** 20 Ja. 1870. 88651*.
— **Campbell.** 25 Ap. 1865. II, **96**. 67143. t. e.
— **Clamond.** 2 Mr. 1876. III, **21**, ii, c. 7, 3, p. 6. 111724.
— **Cole.** 28 Mr. 1876. III, **21**, ii, c. 7, 3, p. 25. 112085. te.
— **Falle-Geary.** 12 Ag. 1876. III, **21**, ii, c. 7, 3, p. 27. 114165. t. e.
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— — and silk. **Ashworth.** 3 F. 1837. I, **77**, p. 171, pl. 9.
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— — apparatus. **de Mouzou.** 12 Ja. 1865. II, **96**. 65851. t. e.
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— — **Good.** 3 Ag. 1875. III, **17**, c. 4, 1, p. 36, pls. 10, 11. 109087.
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— — **Bizet.** 14 Jl. 1863. II, **87**, c. 5, 2, p. 28.
— — **Cantillon.** 18 Jl. 1863. II, **87**, c. 5, 1, p. 17.
— — **Carpentier-Bernard.** 27 F. 1875. III, **16**, i. 106699. t. e.
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— — **Dabert.** 14 Jl. 1876. III, **20**, ii, c. 5, 2, p. 29. 113768.
— — **Delebarre-Dupas.** 6 Mr. 1871. III, **2**, c. 5, 1 *bis*, p. 2.
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— — **Forest et Denoyel.** 22 Ag. 1864. II, **91**. 64157. te.
— — **Gontier.** 19 Ag. 1872. III, **5**, c. 5, 2, p. 55.
— — **Hublard et Voisenet.** 17 Ag. 1868. 82491*.
— — **Jénart.** 10 O. 1865. II, **95**. 68969. t. e.
— — **Lannier et Tranchant.** 12 Je. 1861. II, **80**, c. 5, 1, p. 13, pl. 7.
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— — **Belleville.** 19 Ag. 1872. III, **5**, c. 5, 2, p. 32, pls. 14, 15.
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— — — **Grandjard.** 30 Ag. 1875. III, **16**, i. 109316. t. e.
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— — scraper for cleaning tubular. **Cuvelier.** 5 Ag. 1865. II, **95**. 68238. t. e.
— — spiral. **Delafond et Corradi.** 27 Ag. 1862. II, **82**, c. 5, 2, p. 38.
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— — **Asbury.** 12 Jl. 1873. III, **8**, i, c. 5, 2, p. 53.
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— — **Prince.** 2 My. 1873. III, **8**, i, c. 5, 2, p. 15.
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— — — **Lemaître.** 14 F. 1846. II, **7**, p. 98, pl. 23.
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— — flues. **Benoist.** 22 S. 1866. 82507*.
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— — **Febvre.** 11 Ja. 1876. III, **20**, ii, c. 5, 2, p. 2, pl. 1. 110932*.
— — **François.** 17 Ap. 1874. III, **12**, c. 5, 2, p. 10, pl. 5.
— — **Glépin et Colombet.** 26 My. 1873. III, **8**, i, c. 5, 2, p. 15, pl. 3.
— — **L'Heuiller.** 9 My. 1863. II, **87**, c. 5, 2, p. 6, pl. 6.
— — **Lacroix.** 25 Jl. 1872. III, **5**, c. 5, 2, p. 55.
— — **Lecoq.** 11 D. 1869. 88155*.
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— — **Petin et Gaudet.** 22 Jl. 1862. II, **82**, c. 5, 2, p. 32, pl. 8.
— — **Rusell.** 25 S. 1867. 77811*.
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— — **Taza-Villain.** 3 Mr. 1874. III, **12**, c. 5, 2, p. 7, pl. 5 *bis*.
— — **Vassivière.** 23 Ag. 1862. II, **82**, c. 5, 2, p. 43.
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— — **Berjot.** 14 N. 1867. 78460*.
— — **Black.** 12 N. 1852. II, **28**, p. 325, pl. 44.
— — **Bourdon.** 21 Ap. 1840. I, **72**, p. 524, pl. 42.
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— — **Chase.** 21 O. 1867. 78911*.
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— — **Daliot et Chomeau.** 14 Jl. 1841. I, **53**, p. 486, pl. 32.
— — **Damourette.** 23 D. 1872. III, **5**, c. 5, 2, p. 54; **16**, i, c. 5, 2, p. 4, pl. 15.
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— — **Debailleux.** 12 Ap. 1864. II, **91**, c. 5, 2, p. 3. 62643.
— — **Defert.** 29 Ap. 1874. III, **12**, c. 5, 2, p. 10, pl. 7.
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— — **Fell.** 23 Ap. 1867. 76512*.
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— — **Gerbenne.** 14 My. 1867. 76179*.
— — **Gerds.** 27 Ap. 1872. III, **5**, c. 5, 2, p. 14.
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— — **Guibert.** 23 Ag. 1866. 72582*.
— — **Halipré.** 5 O. 1871. III, **2**, c. 5, 1 *bis*, p. 14.
— — **Hamel.** 5 Ag. 1876. III, **20**, ii, c. 5, 2, p. 30, pl. 6. 114072.
— — **Henriot.** 13 F. 1875. III, **16**, i, c. 5, 2, p. 14, pl. 6.
— — **Hurtrel.** 24 Jl. 1869. 86212*.
— — **Ingermann.** 9 D. 1876. III, **20**, ii, c. 5, 2, p. 54. 115923. t. e.
— — **Kimball.** 4 O. 1869. 87341*.
— — **Latour.** 30 Jl. 1868. 81816*.
— — **Lecarpentier.** 29 Ap. 1863. II, **87**, c. 5, 2, p. 5, pl. 4.
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— — **Péchenart-Barbette et Péchenart.** 8 D. 1873. III, **8**, i, c. 5, 2, p. 45.
— — **Perrier.** 23 Jl. 1868. 81763*.
— — **Perrotte.** 22 Je. 1871. III, **2**, c. 5, 1 *bis*, p. 6, pl. 5.
— — **Pic.** 4 N. 1868. 82862*.
— — **Roberts.** 19 Ja. 1876. III, **20**, ii, c. 5, 2, p. 4, pl. 2. 111150.
— — **Robin.** 16 My. 1873. III, **8**, i, c. 5, 2, p. 52.
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— — **Tellier.** 25 S. 1869. 87292*.
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— — **Van de Weghe.** 2 My. 1857. II, **62**, p. 273, pl. 39.
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— — — **Legris et Mayaud.** 16 Mr. 1863. II, **87**, c. 5, 2, p. 27.
— — — marine. **Norton.** 8 D. 1866. 74025*.
— — case for protecting. **Carrière et Choffel.** 25 S. 1867. 77794*.
— — metallic. **Deschamps et Angelo.** 6 Ag. 1873. III, **8**, i, c. 5, 2, p. 53.
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— — **Douenne.** 23 Ja. 1868. 79183*.
— — **Garnier.** 18 Ja. 1862. II, **82**, c. 5, 2, p. 42.
— — **Varillat et Langlois.** 8 Ag. 1857. II, **63**, p. 159.
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— — indicator. **Achard.** 30 My. 1856. II, **58**, p. 354, pl. 53.
— — — **Bertrand et Cie.** 13 My. 1876. III, **20**, ii, c. 5, 2, p. 15, pl. 2. 112643.
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— with corrugated fire-place. **Castanier et Demange.** 6 Ja. 1873. III, **8**, i, c. 5, 2, p. 1, pl. 3.
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— **Vigne.** 19 D. 1862. II, **83**, c. 20, p. 28.
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hen. **Maltête.** 28 Ja. 1861. II, **81**, c. 20, p. 3.
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— **Blaizot.** 14 S. 1866. 72916*.
— **Blaizot.** 24 D. 1866. 74251*.
— **Blaizot.** 6 Ap. 1872. III, **4**, c. 20, p. 16.
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— **Bonfils.** 10 F. 1865. II, **94**. 66178. t. e.
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— — **Chenel et Desvignes.** 19 Jl. 1865. II, **94**. 68112. t. e.
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— — **Huber.** 23 F. 1864. II, **90**. 62014. t. e.
— with whistle. **Maltête.** 2 Jl. 1866. 72161*.
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Carpezat et Varon. 8 S. 1868. 82310*.
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Combe et Sault. 5 N. 1869. 87697*.
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Geraldy. 16 Jl. 1870. 90684*.
Gervais et Lassus. 14 Ap. 1869. 85256*
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Jouanin. 12 Je. 1869. 86043*.
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Marshall. 11 D. 1869. 88160*.
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Mougeol. 2 Ag. 1869. 86676*.
Moussard. 14 Ag. 1869. 86762*.
Olivier. 9 Je. 1869. 86016*.
Olivier. 10 S. 1869. 87152*.
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Saxby et MacGeorge. 31 Jl. 1869. 86640*.
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Surivay. 2 Ag. 1869. 86680*.
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Thompson. 19 Mr. 1869. 84871*.
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Waldo. 6 Ja. 1870. 88449*.
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— **Michaux.** 3 Ag. 1869. 86674*.
— **Olivier.** 24 Je. 1869. 86222*.
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Faussereau. 5 Jl. 1869. 85938*
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— **Berruyer.** 17 Mr. 1870. 89310*.
— **Camus.** 31 Mr. 1869. 85010*.
— **Couturier.** 20 S. 1871. III, **2**, c. 10, p. 16.
— **Crabos.** 28 D. 1868. 83580*.
— **Fines.** 27 N. 1869. 87996*.
— **Gautier.** 20 Ag. 1869. 86629*.
— **Gervais, Lassus et Derombus.** 2 N. 1867. 78337*.
— **Gontier-Grigy.** 9 Jl. 1869. 85943*.
— **Goupil.** 22 Je. 1869. 85876*.
— **Guetton.** 7 O. 1868. 82691*.
— **Heiller.** 1 Ap. 1869. 85058*.
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— **Keller.** 23 Mr. 1870. 89328*.
— **Lassus et Gervais.** 30 Ap. 1868. 80707*.
— **Leroy.** 23 N. 1868. 83321*.
— **Maréchal.** 7 Ap. 1870. 89427*.
— **Martin.** 12 F. 1869. 84098*.
— **Mazan.** 15 D. 1875. III, **17**, c. 10, 1. 110680. t. e.
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— **Obrecht.** 19 N. 1868. 83075*.
— **Pène.** 2 Jl. 1870. 90465*.
— **Rémond.** 17 Je. 1869. 86352*.
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— **Meyer.** 4 Ag. 1869. 86705*.
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— treadle, etc. **de Stains.** 3 Jl. 1869. 86356*.
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— **Fabre.** 6 Jl. 1870. 90488*
— **Illy.** 1 S. 1869. 87017*.
with trackway. **Bonnefond.** 30 S. 1869. 87301*.
with twin wheels. **Bouet et Chambay.** 15 O. 1868. 82774*.

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cutter. **Garand.** 19 Je. 1872. III, **5**, c. 5, 4, p. 44; **20**, ii, c. 5, 4, p. 2, pl. 1. 95671.
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— — **Chailan de Moriès.** 1 O. 1868. 82614*
— — **Garand.** 2 S. 1844. I, **85**, p. 260, pl. 23.
— — **Lyman et Squires.** 28 Ja. 1869. 84190*.
— — **Mayo.** 4 Ap. 1867. 75952*.
— — **Pape.** 10 My. 1837. I, **64**, p. 302, pl. 28.
— saw. **Cochot.** 7 D. 1814. I, **7**, p. 361, pl. 29.
— — **Lefèvre.** 17 N. 1817. I, **25**. p. 25, pl. 9.
— sheets of. **Hart.** 4 Ag. 1857. II, **64**, p. 255, pl. 47.
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— — manufacture. **Ducat.** 31 Jl. 1876. III, **19**, ii, c. 17, 5, p. 12. 113997. t. e.
— — — **Hachin.** 3 My. 1869. 85551*.
— — safety and puzzle. **Chée.** 23 Jl. 1864. II, **90**. 63901. t. e.
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ERRATA.

P. 38, second column, line 34, for "pl. ?," read "pl. 15."
P. 136, first column, line 53, after "p. 176," supply "pl. 15."
P. 385, second column, line 15, for "I, **50**," read "II, **1**."
P. 549, second column, line 9, for "**de la Crye**," read "**de la Cyre**."
P. 744, first column, line 4, after "**Cartier**," supply "23 O."